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**UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA**

GOOGLE LLC,

*Plaintiff,*

v.

SONOS, INC.,

*Defendant.*

Case No. 3:20-cv-6754

**SONOS, INC.'S SUPPLEMENTAL  
DISCLOSURE OF ASSERTED CLAIMS  
AND INFRINGEMENT  
CONTENTIONS**

Honorable William Alsup

1 Pursuant to Patent Local Rules 3-1 and 3-2 and the Court's instructions during the January  
2 6, 2022 motion hearing, Plaintiff Sonos, Inc. ("Sonos") hereby submits this Supplemental  
3 Disclosure of Asserted Claims and Infringement Contentions for U.S. Patent Nos. 9,967,615 (the  
4 "'615 Patent"), 10,779,033 (the "'033 Patent"), 10,469,966 (the "'966 Patent"), and 10,848,885  
5 ("the '885 Patent") (collectively, "the Asserted Patents").

6 Sonos bases these contentions on its current knowledge, understanding, and belief as to  
7 the facts and information available as of the date of these contentions. Sonos has not yet  
8 completed its investigation, collection of information, discovery, or analysis relating to this  
9 action, and additional discovery, including discovery from Google and third parties, may lead  
10 Sonos to further amend, revise, and/or supplement these contentions. Indeed, the accused  
11 functionalities of the accused instrumentalities are implemented, at least in part, by proprietary  
12 and specialized electronics, firmware, and/or software, and the precise designs, processes, and  
13 algorithms used to perform the accused functionalities are held secret, at least in part, and are not  
14 publicly available in their entirety. As such, an analysis of non-publicly-available documentation  
15 and source code, including that of Google and/or third-parties, such as Spotify, may be necessary  
16 to fully and accurately describe every infringing functionality.

17 However, merits discovery in this action has barely begun and, as of the date of service of  
18 these contentions, is not scheduled to close until November 30, 2022. To date, Google has not  
19 produced documents responsive to Sonos's outstanding document requests, no depositions have  
20 been taken, and third-party discovery remains outstanding including document and deposition  
21 subpoenas to Spotify.

22 Likewise, Google's interrogatory responses are woefully deficient in many respects and  
23 completely non-responsive in others. As a non-limiting example, in response to Sonos's  
24 interrogatories asking Google to explain certain discrete aspects of how Google's own products  
25 work, Google responded only by referring Sonos to Google's entire source code production  
26 (without referring to any particular code modules, functions, methods, line numbers, or even  
27 directories) and by block citing over 48,000 pages of Google's document production. As another  
28 non-limiting example, in response to Sonos's interrogatory asking how the Accused Cast-Enabled

1 Apps are made available for download, Google refused to respond at all. Without the benefit of  
 2 discovery responses from Google, Sonos's inspection of Google's source code is ongoing. Given  
 3 that fact discovery is in its infancy and Google served its (deficient) discovery responses on  
 4 September 7, 2021 and has refused to engage with Sonos about when it will adequately  
 5 supplement its responses, Sonos has not had an opportunity to confer with Google on these  
 6 responses or approach the Court for intervention, if necessary.

7 For at least these reasons, Sonos specifically reserves the right to further amend, revise  
 8 and/or supplement these contentions and/or accompanying exhibits in accordance with any  
 9 Orders of record in this matter, Patent L.R. 3-6, and Federal Rule of Civil Procedure 26(e), as  
 10 additional documents and information become available and as discovery and investigation  
 11 proceed. Sonos also reserves the right to supplement, modify or amend these contentions to  
 12 include additional products or services made, used, sold, or offered for sale in or imported into the  
 13 United States by Google.

14 The information in these contentions is not an admission regarding the scope of any  
 15 claims or the proper construction of those claims or any terms contained therein. Google has not  
 16 indicated whether it intends to advance in this case any construction of any claim pursuant to L.R.  
 17 4-2. In the event Google advances any constructions under L.R. 4-2 pursuant to the Court's Case  
 18 Management Scheduling Order (Dkt. 67), Sonos reserves the right to revise or supplement these  
 19 contentions to address such a construction. *See* Dkt. 67, ¶ 17.

## 20 **I. Disclosure of Asserted Claims & Infringement Contentions**

### 21 **A. Identification of Accused Instrumentalities Pursuant to Patent L.R. 3-1(b)**

22 Based on the information currently in its possession, Sonos contends that the Asserted  
 23 Patents are infringed by Google via, either individually or in combination, the following products  
 24 (individually, "**Accused Instrumentality**" or collectively, "**Accused Instrumentalities**"):

25 '615 and '033 Patents: (a) Smartphone, tablet, and computer devices, including Google's  
 26 own "Pixel" smartphone, tablet, and computer devices (e.g., the Pixel, Pixel XL, Pixel 2, Pixel 2  
 27 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel  
 28 5, Pixel 5a (5G), Pixel 6, and Pixel 6 Pro phones, the Pixel Slate tablet, and the Pixelbook and

Pixelbook Go laptops), as well as third-party smartphone, tablet, and computer devices, that are (i) installed with any of Google’s own Cast-enabled Android, iOS, Chrome or browser-based apps that allow a user to transfer playback of streaming media content from the user’s smartphone, tablet, or computer devices to a Cast-enabled media player and then control the Cast-enabled media player’s playback, including but not limited to the YouTube app, YouTube Kids app, YouTube TV app, YouTube Music app, and Google Play Music app, accessed via either an app store or ChromeCast-enabled site URL<sup>1</sup> (including youtube.com, music.youtube.com, tv.youtube.com, and spotify.com) and/or (ii) installed with any third-party Cast-enabled app that allows a user to transfer playback of streaming media content from the user’s smartphone, tablet, or computer devices to a Cast-enabled media player and then control the Cast-enabled media player’s playback, including but not limited to the Spotify app<sup>2</sup> (the foregoing, including Chromecast-enabled websites, are referred to herein either individually or collectively as the “**accused Cast-enabled apps**”)<sup>3</sup>; (b) Cast-enabled media players having a display screen and installed with Cast-enabled software (e.g., firmware and/or Cast-enabled apps) that allows a user to transfer playback of streaming media content from the Cast-enabled media player to another Cast-enabled media player and then control the other Cast-enabled media player’s playback, including Google’s Home Hub, Nest Hub, and Nest Hub Max media players (referred to herein as “**Cast-enabled displays**”); (c) Servers that host at least one of the accused Cast-enabled apps for download onto or access by smartphone, tablet, or computer devices; and (d) Cloud-based

<sup>1</sup> See, e.g., <https://support.google.com/chromecast/answer/3265953?hl=en>.

<sup>2</sup> See, e.g., <https://support.google.com/chromecast/built-in/answer/6279384?hl=en#zippy=%2Cbefore-you-begin-casting%2Ccast-from-chromecast-enabled-apps-to-your-audio-device%2Cfind-new-content-to-cast;https://www.google.com/chromecast/built-in/apps/>.

<sup>3</sup> Although Sonos is not currently aware of which third-party smartphone, tablet, and computer devices were, between May 2018 to present, actually installed with one or more accused Cast-enabled apps, and awaits production of this information from Google, in the spirit of providing as much disclosure as possible given Google’s request, and in an effort to address the Court’s guidance during the January 6, 2022 hearing, attached hereto as Appendix 1 is a list of possible third-party smartphone, tablet, and computer devices that may have been used to download and install one or more accused Cast-enabled apps between May 2018 to present. Although efforts have been made to compile as accurate and as complete a list as possible, it may be the case that some of the devices listed in Appendix 1 were not used to download and install any accused Cast-enabled apps between May 2018 to present and/or it may be the case that other devices were used to download and install one or more accused Cast-enabled apps between May 2018 to present. Given this, Sonos reserves the right to revise or supplement this as discovery progresses.

1 infrastructure hosting backend software that facilitates the aforementioned Cast functionality for  
 2 transferring playback of streaming media content to a Cast-enabled media player and/or  
 3 controlling the Cast-enabled media player's playback.

4 '966 Patent: (a) Smartphone, tablet, and computer devices, including Google's own  
 5 "Pixel" smartphone, tablet, and computer devices (e.g., the Pixel, Pixel XL, Pixel 2, Pixel 2 XL,  
 6 Pixel 3, Pixel 3XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel 5,  
 7 Pixel 5a (5G), Pixel 6, and Pixel 6 Pro phones, the Pixel Slate tablet, and the Pixelbook and  
 8 Pixelbook Go laptops), as well as third-party smartphone, tablet, or computer devices, that are  
 9 installed with the Google Home app<sup>4</sup>; and (b) Servers that host the Google Home app for  
 10 download onto smartphone, tablet, or computer devices.

11 '885 Patent: **"Cast-enabled media players,"** including Google's Chromecast,  
 12 Chromecast Ultra, Chromecast Audio, Chromecast with Google TV, Home Mini, Nest Mini,  
 13 Home, Home Max, Home Hub, Nest Hub, Nest Hub Max, Nest Audio, and Nest Wifi Point  
 14 media players.

#### 15 **B. Identification of Asserted Claims Pursuant to Patent L.R. 3-1(a)**

16 Based on the information currently in its possession, Sonos asserts the following claims  
 17 (collectively, the "Asserted Claims") literally and/or under the Doctrine of Equivalents. Sonos  
 18 expressly reserves the right to amend and/or supplement its identification of Asserted Claims  
 19 should discovery (including Google's technical documentation, source code, and witnesses)  
 20 reveal additional, relevant information.

U.S. Patent No.	Asserted Claims
9,967,615	1-3, 6-9, 11-15, 18-21, 23-26, 28-29
10,779,033	1-2, 4, 7-13, 15-16
10,469,966	1-4, 6-12, 14-20
10,848,885	1-3, 5-10, 12-17, 19-20

#### 24 **i. Direct Infringement Under 35 U.S.C. § 271(a)**

25 '615 and '033 Patents: Sonos contends that each smartphone, tablet, and computer device  
 26 installed with any one or more of the accused Cast-enabled apps (referred to herein as a **"Cast-**

27 \_\_\_\_\_  
 28 <sup>4</sup> See *supra* note 3. The devices listed in Appendix 1 may have also been used to download and install the Google Home app between November 2019 to present.

1 **enabled computing device”**), as well as each Cast-enabled display, infringes the asserted claims  
2 of the ’615 and ’033 Patents. Thus, Google has directly infringed and continues to directly  
3 infringe each asserted claim of the ’615 and ’033 Patents at least by offering to sell, selling,  
4 and/or importing into the United States its “Pixel” brand of Cast-enabled computing devices, as  
5 well as its Cast-enabled displays, in violation of 35 U.S.C. § 271(a).

6 Further, on information and belief, Google has directly infringed and continues to directly  
7 infringe claims 13-15, 18-21, 23-26, 28-29 of the ’615 Patent and claims 1-2, 4, 7-13 of the ’033  
8 Patent by virtue of installing one or more of the accused Cast-enabled apps onto Cast-enabled  
9 computing devices and installing Cast-enabled software (e.g., firmware updates and/or Cast-  
10 enabled apps) onto Cast-enabled displays within the United States, which constitutes “mak[ing]”  
11 an infringing device under 35 U.S.C. § 271(a).

12 Further yet, on information and belief, Google has directly infringed and continues to  
13 directly infringe each asserted claim of the ’615 and ’033 Patents by virtue of testing Cast-  
14 enabled computing devices and testing Cast-enabled displays within the United States, which  
15 constitutes “us[ing]” an infringing device under 35 U.S.C. § 271(a).

16 Still further, on information and belief, Google operates servers in the United States that  
17 host Cast-enabled apps for download onto Cast-enabled computing devices and/or Cast-enabled  
18 software (e.g., firmware and/or Cast-enabled apps) for download onto Cast-enabled displays, and  
19 these servers infringe certain asserted claims of the ’615 and ’033 Patents (e.g., claims 13-15, 18-  
20 21, and 23-24 of the ’615 Patent and claims 12-13 of the ’033 Patent). Thus, Google has also  
21 directly infringed and continues to directly infringe certain asserted claims of the ’615 and ’033  
22 Patents by “mak[ing]” and/or “us[ing]” servers that host this software in violation of 35 U.S.C. §  
23 271(a).

24 ’966 Patent: Sonos contends that each computing device installed with at least the Google  
25 Home app infringes every asserted claim of the ’966 Patent. Thus, Google has directly infringed  
26 and continues to directly infringe each asserted claim of the ’966 Patent at least by offering to  
27 sell, selling, and/or importing into the United States its “Pixel” brand of computing devices that  
28 are installed with the Google Home app.

1 Further, on information and belief, Google has directly infringed and continues to directly  
2 infringe claims 1-4, 6-12, 14-16 of the '966 Patent by virtue of installing at least the Google  
3 Home app onto computing devices, which constitutes "mak[ing]" an infringing device under 35  
4 U.S.C. § 271(a).

5 Further yet, on information and belief, Google has directly infringed and continues to  
6 directly infringe each asserted claim of the '966 Patent by virtue of testing computing devices  
7 installed with at least the Google Home app, which constitutes "us[ing]" an infringing device  
8 under 35 U.S.C. § 271(a).

9 Still further, on information and belief, Google operates servers in the United States that  
10 host at least the Google Home app for download onto smartphone, tablet, and computer devices,  
11 and these servers infringe certain asserted claims of the '966 Patent (e.g., claims 9-12 and 14-16).  
12 Thus, Google has also directly infringed and continues to directly infringe certain asserted claims  
13 of the '966 Patent at least by "mak[ing]" and/or "us[ing]" servers that host at least the Google  
14 Home app in violation of 35 U.S.C. § 271(a).

15 '885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted  
16 claim of the '885 Patent. Thus, Google has directly infringed and continues to directly infringe  
17 each asserted claim of the '885 Patent at least by offering to sell, selling, and/or importing into the  
18 United States Cast-enabled media players.

19 Further, on information and belief, Google has directly infringed and continues to directly  
20 infringe claims 1-3, 5-10, 12-14 of the '885 Patent by virtue of installing software (e.g., firmware  
21 updates) onto Cast-enabled media players, which constitutes "mak[ing]" an infringing device  
22 under 35 U.S.C. § 271(a).

23 Further yet, on information and belief, Google has directly infringed and continues to  
24 directly infringe each asserted claim of the '885 Patent by virtue of using Cast-enabled media  
25 players, which constitutes "us[ing]" an infringing device under 35 U.S.C. § 271(a).

26 **ii. Induced Infringement Under 35 U.S.C. § 271(b)**

27 Pursuant to 35 U.S.C. § 271(b), Google also actively, knowingly, and intentionally  
28 induced (and continues to actively, knowingly, and intentionally induce) others to make, use,



1 offer to sell, sell, and/or import the Accused Instrumentalities into the United States. As noted in  
2 Sonos's Amended Complaint, Google had actual knowledge of the Asserted Patents prior to the  
3 filing of the Complaint. *See also* Google LLC's Objections and Responses to Sonos's Inc.'s First  
4 Set of Interrogatories (Nos. 1-20) (dated September 7, 2021) at Google's response to Sonos's  
5 Interrogatory No. 1; Sonos, Inc.'s Objections and Responses to Google LLC's First Set of  
6 Interrogatories (Nos. 1-20) (dated September 7, 2021) at Sonos's response to Google's  
7 Interrogatory No. 14, both of which are herein incorporated by reference.

8 '615 and '033 Patents: Sonos contends that each Cast-enabled computing device, as well  
9 as each Cast-enabled display, infringes every asserted claim of the '615 and '033 Patents. Despite  
10 knowing of the '615 and '033 Patents, Google has actively, knowingly, and intentionally induced  
11 (and continues to actively, knowingly, and intentionally induce) others to directly infringe the  
12 asserted claims in various ways, in violation of 35 U.S.C. § 271(b).

13 For example, through Google's website, advertising and promotional material, user  
14 guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally  
15 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and  
16 induce) others to install one or more of the accused Cast-enabled apps (including Google's own  
17 Cast-enabled apps and third-party Cast-enabled apps, such as Spotify) onto computing devices,  
18 and thereby "make[]" an infringing device, which constitutes direct infringement of claims 13-15,  
19 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C.  
20 § 271(a).

21 As another example, through Google's website, advertising and promotional material, user  
22 guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally encouraged and  
23 induced (and continues to actively, knowingly, and intentionally encourage and induce) others to  
24 install Cast-enabled software (e.g., firmware updates and/or Cast-enabled apps) onto the Cast-  
25 enabled displays, and thereby "make[]" an infringing device, which constitutes direct  
26 infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of  
27 the '033 Patent under 35 U.S.C. § 271(a).

1 As yet another example, through Google’s website, advertising and promotional material,  
2 user guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally  
3 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and  
4 induce) others to “use” Cast-enabled computing devices installed with one or more of the accused  
5 Cast-enabled apps (including Google’s own Cast-enabled apps and third-party Cast-enabled apps,  
6 such as Spotify) and “use” Cast-enabled displays, which constitutes direct infringement of the  
7 asserted claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a).

8 As a further example, Google has actively, knowingly, and intentionally encouraged and  
9 induced (and continues to actively, knowingly, and intentionally encourage and induce)  
10 distributors and retailers to “offer[] to sell” and “sell[]” Cast-enabled computing devices installed  
11 with one or more of the accused Cast-enabled apps, as well as Cast-enabled displays, which  
12 constitutes direct infringement of the asserted claims of the ’615 and ’033 Patents under 35  
13 U.S.C. § 271(a).

14 As still another example, by making, importing, offering to sell, and selling Cast-enabled  
15 media players programmed with software that facilitates the accused Cast functionality in the  
16 accused Cast-enabled apps and Cast-enabled software for transferring playback of streaming  
17 media content from a Cast-enabled computing device or Cast-enabled display to a Cast-enabled  
18 media player and then controlling the Cast-enabled media player’s playback via the Cast-enabled  
19 computing device or Cast-enabled display, Google has actively, knowingly, and intentionally  
20 induced (and continues to actively, knowingly, and intentionally induce) others to “mak[e]” and  
21 “use” Cast-enabled computing devices and Cast-enabled displays, which constitutes direct  
22 infringement of the asserted claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a).

23 As still a further example, for certain of the accused Cast-enabled apps (including  
24 Google’s own Cast-enabled apps and third-party apps, such as Spotify), the backend software that  
25 facilitates the accused Cast functionality for transferring playback of streaming media content  
26 from a Cast-enabled computing device or Cast-enabled display to a Cast-enabled media player  
27 and then controlling the Cast-enabled media player’s playback via the Cast-enabled computing  
28 device or Cast-enabled display is hosted by Google on Cloud-based infrastructure that is owned

1 and/or operated by Google (sometimes referred to as Google Cloud Platform or “GCP” for short),  
2 and by virtue of hosting this backend software, Google has actively, knowingly, and intentionally  
3 induced (and continues to actively, knowingly, and intentionally induce) others to “mak[e]” and  
4 “use” Cast-enabled computing devices and Cast-enabled displays, which constitutes direct  
5 infringement of the asserted claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a).

6 As another example, through its relationship and collaboration with third parties, such as  
7 Spotify, that develop and release third-party Cast-enabled apps having the accused Cast  
8 functionality for transferring playback of streaming media content from a Cast-enabled  
9 computing device or Cast-enabled display to a Cast-enabled media player and then controlling the  
10 Cast-enabled media player’s playback via the Cast-enabled computing device or Cast-enabled  
11 display, Google has actively, knowingly, and intentionally induced (and continues to actively,  
12 knowingly, and intentionally induce) such third parties to “make[]” and “use[]” Cast-enabled  
13 computing devices and Cast-enabled displays, which constitutes direct infringement of the  
14 asserted claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a).

15 Along with its actual knowledge of the ’615 and ’033 Patents, Google also knew (or  
16 should have known) that its actions would induce others to directly infringe the asserted claims of  
17 the ’615 and ’033 Patents. For example, Google has supplied and continues to supply from the  
18 United States its own Cast-enabled apps to users in the United States and abroad and encourages  
19 installation and use of such Cast-enabled apps in the United States and abroad while knowing that  
20 the installation and use of Google’s Cast-enabled apps will infringe the asserted claims of the  
21 ’615 and ’033 Patents. As another example, Google has supplied and continues to supply from the  
22 United States its Cast technology for incorporation into third-party Cast-enabled apps (such as  
23 Spotify) and encourages installation and use of such third-party Cast-enabled apps while knowing  
24 that the installation and use of these third-party Cast-enabled apps will infringe the asserted  
25 claims of the ’615 and ’033 Patents. As yet another example, Google has supplied and continues  
26 to supply Cast-enabled displays (and software for the Cast-enabled displays) to users and  
27 encourages installation and use of Cast-enabled software on the Cast-enabled displays while  
28 knowing that such installation and use will infringe the asserted claims of the ’615 and ’033

1 Patents. As still another example, for certain of the accused Cast-enabled apps (including  
2 Google's own Cast-enabled apps and third-party apps, such as Spotify), Google has hosted and  
3 continues to host backend software that facilitates the accused Cast functionality on Cloud-based  
4 infrastructure that is owned and/or operated by Google while knowing that installation and use of  
5 such Cast-enabled apps will infringe the asserted claims of the '615 and '033 Patents.

6 '966 Patent: Sonos contends that each computing device installed with at least the Google  
7 Home app infringes every asserted claim of the '966 Patent. Despite knowing of the '966 Patent,  
8 Google has actively, knowingly, and intentionally induced (and continues to actively, knowingly,  
9 and intentionally induce) others to directly infringe the asserted claims by actively encouraging  
10 others to make, use, offer to sell, sell, and/or import the aforementioned devices into the United  
11 States in violation of 35 U.S.C. § 271(b).

12 For example, through Google's website, advertising and promotional material, user  
13 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or  
14 displayed on the Cast-enabled media players, Cast-enabled computing devices, and/or Cast-  
15 enabled displays, Google has actively, knowingly, and intentionally encouraged and induced (and  
16 continues to actively, knowingly, and intentionally encourage and induce) others to install the  
17 Google Home app onto computing devices, and thereby "make[]" an infringing device, which  
18 constitutes direct infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. §  
19 271(a).

20 As another example, through Google's website, advertising and promotional material, user  
21 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or  
22 displayed on the Cast-enabled media players, Cast-enabled computing devices, and/or Cast-  
23 enabled displays, Google has actively, knowingly, and intentionally encouraged and induced (and  
24 continues to actively, knowingly, and intentionally encourage and induce) others to "use"  
25 computing devices installed with the Google Home app, which constitutes direct infringement of  
26 the asserted claims of the '966 Patent under 35 U.S.C. § 271(a).

27 As yet another example, Google has actively, knowingly, and intentionally encouraged  
28 and (and continues to actively, knowingly, and intentionally encourage and induce) distributors

1 and retailers to “offer[] to sell” and “sell[]” computing devices installed with at least the Google  
 2 Home app, which constitutes direct infringement of the asserted claims of the ’966 Patent under  
 3 35 U.S.C. § 271(a).

4 As still another example, by making, importing, offering to sell, and selling Cast-enabled  
 5 media players that require users to install the Google Home app in order to set up and configure  
 6 the Cast-enabled media players and Cast-enabled displays, Google has actively, knowingly, and  
 7 intentionally induced (and continues to actively, knowingly, and intentionally induce) others to  
 8 “mak[e]” and “use” computing devices installed with the Google Home app, which constitutes  
 9 direct infringement of the asserted claims of the ’966 Patent under 35 U.S.C. § 271(a).

10 Along with its actual knowledge of the ’966 Patent, Google also knew (or should have  
 11 known) that its actions would induce others to directly infringe the asserted claims of the ’966  
 12 Patent. For example, Google has supplied and continues to supply from the United States the  
 13 Google Home app to users in the United States and abroad while knowing that the download and  
 14 installation of this app will infringe the asserted claims of the ’966 Patent.

15 ’885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted  
 16 claim of the ’885 Patent. Despite knowing of the ’885 Patent, Google has actively, knowingly,  
 17 and intentionally induced (and continues to actively, knowingly, and intentionally induce) others  
 18 to directly infringe the asserted claims by actively encouraging others to make, use, offer to sell,  
 19 sell, and/or import Cast-enabled media players into the United States in violation of 35 U.S.C. §  
 20 271(b).

21 For example, through Google’s website, advertising and promotional material, user  
 22 guides, the Google Home app (among other apps offered by Google), and/or the Google Play  
 23 Store, Google has actively, knowingly, and intentionally encouraged and induced (and continues  
 24 to actively, knowingly, and intentionally encourage and induce) others to install firmware updates  
 25 onto Cast-enabled media players, and thereby “make[]” an infringing device, which constitutes  
 26 direct infringement of claims 1-3, 5-10, 12-14 of the ’885 Patent under 35 U.S.C. § 271(a).

27 As another example, through Google’s website, advertising and promotional material, user  
 28 guides, the Google Home app (among other apps offered by Google), and/or the Google Play

1 Store, Google has actively, knowingly, and intentionally encouraged and induced (and continues  
 2 to actively, knowingly, and intentionally encourage and induce) others to “use” Cast-enabled  
 3 media players, which constitutes direct infringement of the asserted claims of the ’885 Patent  
 4 under 35 U.S.C. § 271(a).

5 As yet another example, Google has actively, knowingly, and intentionally induced (and  
 6 continues to actively, knowingly, and intentionally induce) distributors and retailers to “offer[] to  
 7 sell” and “sell[]” Cast-enabled media players, which constitutes direct infringement of the  
 8 asserted claims of the ’885 Patent under 35 U.S.C. § 271(a).

9 Along with its actual knowledge of the ’885 Patent, Google also knew (or should have  
 10 known) that its actions would induce others to directly infringe the asserted claims of the ’885  
 11 Patent. For instance, Google has supplied and continues to supply Cast-enabled media players (as  
 12 well as firmware updates) to users while knowing that the use of Cast-enabled media players will  
 13 infringe the asserted claims of the ’885 Patent.

### 14 **iii. Contributory Infringement Under 35 U.S.C. § 271(c)**

15 Pursuant to 35 U.S.C. § 271(c), Google has also contributorily infringed (and continues to  
 16 contributorily infringe) the asserted claims of the Asserted Patents by supplying software  
 17 components in the United States to be installed and/or used by users of the Accused  
 18 Instrumentalities – each of which is a material component of the Accused Instrumentalities that  
 19 has no substantial noninfringing use – with knowledge that the software components were  
 20 especially made or adapted for use in an Accused Instrumentality such that the installation and/or  
 21 use of the software components would result in direct infringement. As noted in Sonos’s  
 22 Amended Complaint, Google had actual knowledge of the Asserted Patents prior to the filing of  
 23 the Complaint. *See also* Google LLC’s Objections and Responses to Sonos’s Inc.’s First Set of  
 24 Interrogatories (Nos. 1-20) (dated September 7, 2021) at Google’s response to Sonos’s  
 25 Interrogatory No. 1; Sonos, Inc.’s Objections and Responses to Google LLC’s First Set of  
 26 Interrogatories (Nos. 1-20) (dated September 7, 2021) at Sonos’s response to Google’s  
 27 Interrogatory No. 14, both of which are herein incorporated by reference.

1       '615 and '033 Patents: Google has contributorily infringed (and continues to  
2 contributorily infringe) the asserted claims of the '615 and '033 Patents by virtue of the fact that  
3 (i) in addition to importing and selling certain Cast-enabled computing devices that come pre-  
4 installed with one or more of the accused Cast-enabled apps, Google supplies software  
5 components for performing the accused Cast functionality as part of Google's own Cast-enabled  
6 apps for installation onto Cast-enabled computing devices in the United States and also as part of  
7 Google's own Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for installation  
8 onto Cast-enabled displays in the United States, and each time a user installs these software  
9 components, the user "makes" an infringing device and thereby directly infringes the asserted  
10 claims of the '615 and '033 Patents under 35 U.S.C. § 271(a), and (ii) on information and belief,  
11 Google additionally supplies software components for performing the accused Cast functionality  
12 to third parties (such as Spotify) that incorporate such software code into third-party Cast-enabled  
13 apps for installation onto Cast-enabled computing devices and/or Cast-enabled displays in the  
14 United States, and each time a user installs these software components, the user "makes" an  
15 infringing device.

16       The software components for performing the accused Cast functionality are material  
17 components of infringing devices that are not staple articles or commodities of commerce suitable  
18 for substantial noninfringing use because the only possible use for these software components is  
19 to be installed and run on infringing Cast-enabled computing devices and Cast-enabled displays.

20       Along with its actual knowledge of the '615 and '033 Patents, Google knew (or should  
21 have known) that the software components for performing the accused Cast functionality were  
22 especially made or adapted for installation on infringing devices, and that installation of these  
23 software components by others resulted in (and continues to result in) direct infringement of the  
24 '615 and '033 Patents under 35 U.S.C. § 271(a) because each such installation "makes" a device  
25 that meets every element of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2,  
26 4, 7-13 of the '033 Patent .

27       Moreover, as a result of Google's contributory conduct, others have directly infringed the  
28 asserted claims of the '615 and '033 Patents. For example, users have installed the supplied



1 software components for performing the accused Cast functionality (which are included in  
2 Google’s own Cast-enabled apps, as well as third-party apps, such as Spotify) onto Cast-enabled  
3 computing devices in the United States, thereby “making” infringing devices. As another  
4 example, users have installed the supplied software components for performing the accused Cast  
5 functionality (which are included in firmware, as well as Cast-enabled apps) onto Cast-enabled  
6 displays in the United States, thereby “making” updated Cast-enabled displays that are infringing  
7 devices. As yet another example, after installing the supplied software components for  
8 performing the accused Cast functionality onto Cast-enabled computing devices and Cast-enabled  
9 displays, users have used these infringing devices, which also constitutes direct infringement.

10 ’966 Patent: Google has contributorily infringed (and continues to contributorily infringe)  
11 the asserted claims of the ’966 Patent by virtue of the fact that it supplies software components  
12 for performing the accused functionality as part of the Google Home app in the United States, and  
13 each time a user installs the Google Home app onto a computing device, the user “makes” an  
14 infringing device and thereby directly infringes the asserted claims of the ’966 Patent under 35  
15 U.S.C. § 271(a). The software components included in the Google Home app are material  
16 components of infringing devices that are not staple articles or commodities of commerce suitable  
17 for substantial noninfringing use because the only possible use for these software components is  
18 to be installed and run on infringing computing devices.

19 Along with its actual knowledge of the ’966 Patent, Google knew (or should have known)  
20 that the software components included in the Google Home app were especially made or adapted  
21 for installation on infringing devices, and that installation of these software components by others  
22 resulted in (and continues to result in) direct infringement of the ’966 Patent under 35 U.S.C. §  
23 271(a) because each such installation “makes” a device that meets every element of claims 1-4, 6-  
24 12, 14-16 of the ’966 Patent .

25 Moreover, as a result of Google’s contributory conduct, others have directly infringed the  
26 asserted claims of the ’966 Patent. For example, users have installed the supplied software  
27 components included as part of the Google Home app onto computing devices in the United  
28 States, thereby “making” infringing computing devices. As another example, after installing the



1 software components included as part of the Google Home app onto computing devices, users  
2 have used these infringing devices, which also constitutes direct infringement of the asserted  
3 claims.

4 '885 Patent: Google has contributorily infringed (and continues to contributorily infringe)  
5 the asserted claims of the '885 Patent by virtue of the fact that, in addition to importing and  
6 selling Cast-enabled media players that come pre-installed with firmware, Google supplies  
7 software components for performing the accused functionality as part of firmware updates for  
8 Cast-enabled media players in the United States, and each time a user installs such a firmware  
9 update, the user "makes" an infringing device and thereby directly infringes claims 1-3, 5-10, 12-  
10 14 of the '885 Patent under 35 U.S.C. § 271(a). The software components included in the  
11 firmware updates are material components of Cast-enabled media players that are not staple  
12 articles or commodities of commerce suitable for substantial noninfringing use because the only  
13 possible use for these software components is to be installed and run on Cast-enabled media  
14 players.

15 Along with its actual knowledge of the '885 Patent, Google knew (or should have known)  
16 that the software components included in the firmware updates were especially made or adapted  
17 for installation on Cast-enabled media players, and that installation of these software components  
18 by others resulted in (and continues to result in) direct infringement of the '885 Patent under 35  
19 U.S.C. § 271(a) because each such installation "makes" an updated player that meets every  
20 element claims 1-3, 5-10, 12-14 of the '885 Patent.

21 Moreover, as a result of Google's contributory conduct, others have directly infringed the  
22 asserted claims of the '885 Patent. For example, users have installed the supplied software  
23 components included as part of the firmware updates onto Cast-enabled media players in the  
24 United States, thereby "making" updated Cast-enabled media players, which constitutes direct  
25 infringement. As another example, after installing the software components included as part of  
26 the firmware updates onto Cast-enabled media players, users have used Cast-enabled media  
27 players, which also constitutes direct infringement of the asserted claims.

1                                    **iv.      Infringement Under 35 U.S.C. § 271(f)(1)**

2            Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the  
 3    United States software and/or firmware components, which constitute substantial portions of the  
 4    components of Sonos's patented inventions, and actively, knowingly, and intentionally induced  
 5    (and continues to actively, knowingly, and intentionally induce) others outside of the United  
 6    States to combine these software and/or firmware components in a manner that, if such  
 7    combination would have occurred in the United States (as it does pursuant to the theories set forth  
 8    in § I.B.iii), infringes the asserted claims of the Asserted Patents. And these combinations by  
 9    those outside of the United States do in fact occur. Accordingly, by supplying such software  
 10   and/or firmware components from the United States, Google is liable for infringement under 35  
 11   U.S.C. § 271(f)(1).

12            '615 and '033 Patents: Sonos contends that each Cast-enabled computing device, as well  
 13   as each Cast-enabled display, infringes every asserted claim of the '615 and '033 Patents. Despite  
 14   knowing of the '615 and '033 Patents, Google supplies software components for performing the  
 15   accused Cast functionality as part of Google's own Cast-enabled apps for installation onto Cast-  
 16   enabled computing devices and also as part of Google's own Cast-enabled software (e.g.,  
 17   firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays. These software  
 18   and/or firmware components are at least substantial portions of the components of the patented  
 19   inventions of the '615 and '033 Patents. Google supplies these software and/or firmware  
 20   components from the United States to various entities outside the United States. Google then  
 21   induces those entities to combine the supplied components in a manner that would, if combined  
 22   within the United States, constitute infringement. Google has actively, knowingly, and  
 23   intentionally induced (and continues to actively, knowingly, and intentionally induce) these  
 24   entities to make such combinations outside the United States in various ways, in violation of 35  
 25   U.S.C. § 271(f)(1).

26            For example, through Google's website, advertising and promotional material, user  
 27   guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally  
 28   encouraged and induced (and continues to actively, knowingly, and intentionally encourage and

1 induce) others outside the United States to install one or more of the accused Cast-enabled apps  
2 (including Google’s own Cast-enabled apps and third-party Cast-enabled apps, such as Spotify)  
3 onto computing devices outside of the United States. If this combination were done within the  
4 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct  
5 infringement of claims 13-15, 18-21, 23-26, 28-29 of the ‘615 Patent and claims 1-2, 4, 7-13 of  
6 the ‘033 Patent under 35 U.S.C. § 271(a).

7 As another example, through Google’s website, advertising and promotional material, user  
8 guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally encouraged and  
9 induced (and continues to actively, knowingly, and intentionally encourage and induce) others  
10 outside the United States to install Cast-enabled software (e.g., firmware updates and/or Cast-  
11 enabled apps) onto the Cast-enabled displays outside of the United States. If this combination  
12 were done within the United States, that act would constitute “mak[ing]” an infringing device,  
13 which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the ‘615 Patent and  
14 claims 1-2, 4, 7-13 of the ‘033 Patent under 35 U.S.C. § 271(a).

15 As another example, through Google’s relationship with third-party manufacturers, third-  
16 party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
17 role, Google actively, knowingly, and intentionally encourages and induces or instructs such  
18 parties to install one or more of the accused Cast-enabled apps (including Google’s own Cast-  
19 enabled apps and third-party Cast-enabled apps, such as Spotify) onto computing devices outside  
20 of the United States. If this combination were done within the United States, that act would  
21 constitute “mak[ing]” an infringing device, which constitutes direct infringement of claims 13-15,  
22 18-21, 23-26, 28-29 of the ‘615 Patent and claims 1-2, 4, 7-13 of the ‘033 Patent under 35 U.S.C.  
23 § 271(a).

24 As another example, through Google’s relationship with third-party manufacturers, third-  
25 party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
26 role, Google actively, knowingly, and intentionally encourages and induces or instructs such  
27 parties to install Cast-enabled software (e.g., firmware updates and/or Cast-enabled apps) onto the  
28 Cast-enabled displays outside of the United States. If this combination were done within the

1 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct  
 2 infringement of claims 13-15, 18-21, 23-26, 28-29 of the ‘615 Patent and claims 1-2, 4, 7-13 of  
 3 the ‘033 Patent under 35 U.S.C. § 271(a).

4 As still another example, through Google’s relationship with entities (including affiliated  
 5 entities) that operate servers outside of the United States that host Cast-enabled apps for  
 6 download onto Cast-enabled computing devices and/or Cast-enabled software (e.g., firmware  
 7 and/or Cast-enabled apps) for download onto Cast-enabled displays, Google actively, knowingly,  
 8 and intentionally encourages and induces or instructs these entities to load, store, or otherwise  
 9 provide the Cast-enabled apps and/or Cast-enabled software onto these servers. If this  
 10 combination were done within the United States, that act would constitute direct infringement of  
 11 certain asserted claims of the ‘615 and ‘033 Patents (e.g., claims 13-15, 18-21, and 23-24 of the  
 12 ‘615 Patent and claims 12-13 of the ‘033 Patent) by “mak[ing]” and/or “us[ing]” servers that host  
 13 such software in violation of 35 U.S.C. § 271(a).

14 As still another example, through its relationship and collaboration with third parties  
 15 outside the United States, such as Spotify, that develop and release third-party Cast-enabled apps  
 16 having the accused Cast functionality for transferring playback of streaming media content from a  
 17 Cast-enabled computing device or Cast-enabled display to a Cast-enabled media player and then  
 18 controlling the Cast-enabled media player’s playback via the Cast-enabled computing device or  
 19 Cast-enabled display, Google has provided software components to these third parties and then  
 20 actively, knowingly, and intentionally induced (and continues to actively, knowingly, and  
 21 intentionally induce) such third parties to incorporate these software components into apps and  
 22 products in a manner that if done within the United States, would constitute direct infringement of  
 23 certain asserted claims of the ‘615 and ‘033 Patents (e.g., claims 13-15, 18-21, 23-26, 28-29 of  
 24 the ‘615 Patent and claims 1-2, 4, 7-13 of the ‘033 Patent) by “mak[ing]” or “us[ing]” an  
 25 infringing device under 35 U.S.C. § 271(a).

26 ’966 Patent: Sonos contends that each computing device installed with at least the Google  
 27 Home app infringes every asserted claim of the ‘966 Patent. Despite knowing of the ‘966 Patent,  
 28 Google supplies the Google Home app from the United States to various entities outside the

1 United States. Google then induces those entities to combine the Google Home app in a manner  
2 that would, if combined within the United States, constitute infringement. Google has actively,  
3 knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally  
4 induce) these entities to make such combinations outside the United States in various ways, in  
5 violation of 35 U.S.C. § 271(b).

6 For example, through Google's website, advertising and promotional material, user  
7 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or  
8 displayed on the Cast-enabled media players and Cast-enabled displays, Google has actively,  
9 knowingly, and intentionally encouraged and induced (and continues to actively, knowingly, and  
10 intentionally encourage and induce) others outside the United States to install the Google Home  
11 app onto computing devices outside the United States. If this combination were done within the  
12 United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct  
13 infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a).

14 As another example, through Google's relationship with entities (including affiliated  
15 entities) that operate servers outside of the United States that host the Google Home app for  
16 download onto smartphone, tablet, and computer devices, Google actively, knowingly, and  
17 intentionally encourages and induces or instructs these entities to load, store, or otherwise provide  
18 the Google Home app onto these servers. If this combination were done within the United States,  
19 that act would constitute direct infringement of certain asserted claims of the '966 Patent (e.g.,  
20 claims 9-12 and 14-16) by "mak[ing]" and/or "us[ing]" servers that host such software in  
21 violation of 35 U.S.C. § 271(a).

22 '885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted  
23 claim of the '885 Patent. Despite knowing of the '885 Patent, Google supplies from the United  
24 States software components for performing the accused functionality as part of firmware updates  
25 for Cast-enabled media players. Google then through Google's website, advertising and  
26 promotional material, user guides, the Google Home app (among other apps offered by Google),  
27 and/or the Google Play Store, Google has actively, knowingly, and intentionally encouraged and  
28 induced (and continues to actively, knowingly, and intentionally encourage and induce) others

1 outside the United States to install firmware updates onto Cast-enabled media players outside the  
 2 United States. If this combination were done within the United States, that act would constitute  
 3 “mak[ing]” or “us[ing]” an infringing device, which constitutes direct infringement of the  
 4 asserted claims of the ‘885 Patent under 35 U.S.C. § 271(a).

5 As another example, through Google’s relationship with third-party manufacturers, third-  
 6 party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor  
 7 role, Google actively, knowingly, and intentionally encourages and induces or instructs such  
 8 parties to, outside of the United States, install or load firmware onto Cast-enabled media players.  
 9 If this combination were done within the United States, that act would constitute “mak[ing]” an  
 10 infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the ‘885  
 11 Patent under 35 U.S.C. § 271(a).

12 **v. Infringement Under 35 U.S.C. § 271(f)(2)**

13 Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software  
 14 components in or from the United States to be combined, installed, loaded, and/or used by others  
 15 outside of the United States, where these software components are components of the patented  
 16 inventions that have no substantial noninfringing use and are not staple articles or commodities of  
 17 commerce – with knowledge that these software components were especially made or adapted for  
 18 use and an intent that these software components would be combined, installed, loaded, and/or  
 19 used outside the United States such that, if such combination, installation, load, and/or use  
 20 occurred within the United States (as it does pursuant to the theories set forth in § I.B.iii), it  
 21 would infringe the asserted claims of the Asserted Patents. And these combinations by those  
 22 outside of the United States do in fact occur. Accordingly, by supplying such software  
 23 components in or from the United States, Google is liable for infringement under 35 U.S.C. §  
 24 271(f)(2).

25 ‘615 and ‘033 Patents: Sonos contends that each Cast-enabled computing device, as well  
 26 as each Cast-enabled display, infringes every asserted claim of the ‘615 and ‘033 Patents.  
 27 Despite knowing of the ‘615 and ‘033 Patents, Google supplies software components for  
 28 performing the accused Cast functionality as part of Google’s own Cast-enabled apps for

1 installation onto Cast-enabled computing devices outside the United States and also as part of  
2 Google's own Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for installation  
3 onto Cast-enabled displays outside the United States. Google intends that others outside the  
4 United States, including users, install these software components onto computing devices and  
5 Cast-enabled displays and knows that such installation does in fact occur and that such  
6 installation, if occurring in the United States, would constitute "mak[ing]" an infringing device  
7 thereby directly infringing claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4,  
8 7-13 of the '033 Patent under 35 U.S.C. § 271(a).

9 Despite knowing of the '615 and '033 Patents, Google additionally supplies software  
10 components for performing the accused Cast functionality to third parties (such as Spotify) that  
11 incorporate such software code into third-party Cast-enabled apps for installation onto Cast-  
12 enabled computing devices and/or Cast-enabled displays outside of the United States. Google  
13 intends that these third parties (such as Spotify) incorporate such software code into third-party  
14 Cast-enabled apps for installation onto Cast-enabled computing devices and/or Cast-enabled  
15 displays outside of the United States and knows that such incorporation does in fact occur and  
16 that such incorporation, if occurring in the United States, would constitute "mak[ing]" an  
17 infringing device thereby directly infringing claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent  
18 and claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).

19 As another example, Google supplies software components for performing the accused  
20 Cast functionality to third-party manufacturers, third-party distributors, or to an otherwise  
21 affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United  
22 States installs these software components onto computing devices outside of the United States.  
23 Google intends that these parties install these software components onto computing devices  
24 outside of the United States. If this combination were done within the United States, that act  
25 would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims  
26 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent under 35  
27 U.S.C. § 271(a).



1 As another example, Google supplies software components for performing the accused  
2 Cast functionality to entities (including affiliated entities) that operate servers outside of the  
3 United States that host Cast-enabled apps for download onto Cast-enabled computing devices  
4 and/or Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for download onto Cast-  
5 enabled displays. Google intends that these entities load, store, or otherwise provide the Cast-  
6 enabled apps and/or Cast-enabled software onto these servers. If this combination were done  
7 within the United States, that act would constitute direct infringement of certain asserted claims  
8 of the '615 and '033 Patents (e.g., claims 13-15, 18-21, and 23-24 of the '615 Patent and claims  
9 12-13 of the '033 Patent) by “mak[ing]” and/or “us[ing]” servers that host such software in  
10 violation of 35 U.S.C. § 271(a).

11 Google knows the foregoing software components for performing the accused Cast  
12 functionality are material components of infringing devices and the patented inventions that are  
13 not staple articles or commodities of commerce suitable for substantial noninfringing use because  
14 the only possible use for these software components is to be loaded, installed, and/or run on  
15 infringing Cast-enabled computing devices and Cast-enabled displays.

16 '966 Patent: Sonos contends that each computing device installed with at least the Google  
17 Home app infringes every asserted claim of the '966 Patent. Despite knowing of the '966 Patent,  
18 Google supplies software components for performing the accused functionality as part of the  
19 Google Home app in or from the United States to various entities outside the United States.  
20 Google knows and intends for those entities to combine the software components in a manner that  
21 would, if combined within the United States, constitute infringement because each combination  
22 or installation of the Google Home app onto a computing device would constitute “mak[ing]” an  
23 infringing device and thus directly infringe claims 1-4, 6-12, 14-16 of the '966 Patent under 35  
24 U.S.C. § 271(a).

25 Google knows that the software components included in the Google Home app are  
26 material components of infringing devices that are not staple articles or commodities of  
27 commerce suitable for substantial noninfringing use because the only possible use for these  
28 software components is to be installed and run on infringing computing devices.



1 Along with its actual knowledge of the '966 Patent, Google knew (or should have known)  
2 that the software components included in the Google Home app were especially made or adapted  
3 for installation on infringing devices, and that installation of these software components by others  
4 outside of the United States would, if done within the United States, constitute (and continues to  
5 result in) direct infringement of the '966 Patent under 35 U.S.C. § 271(a) because each such  
6 installation “makes” a device that meets every element of every asserted claims.

7 Moreover, as a result of Google providing software components of the Google Home app,  
8 others have outside of the United States combined the Google Home app in a manner that, if done  
9 within the United States, would constitute direct infringement of the asserted claims of the '966  
10 Patent. For example, others outside the United States have installed the Google Home app onto  
11 computing devices outside the United States. If this combination were done within the United  
12 States, that act would constitute “mak[ing]” an infringing device, which constitutes direct  
13 infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a).

14 As another example, Google supplies software components of the Google Home app to  
15 entities (including affiliated entities) that operate servers outside of the United States that host the  
16 Google Home app for download onto smartphone, tablet, and computer devices. Google intends  
17 that these entities load, store, or otherwise provide the Google Home app onto these servers. If  
18 this combination were done within the United States, that act would constitute direct infringement  
19 of certain asserted claims of the '966 Patent (e.g., claims 9-12 and 14-16) by “mak[ing]” and/or  
20 “us[ing]” servers that host such software in violation of 35 U.S.C. § 271(a).

21 '885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted  
22 claim of the '885 Patent. Despite knowing of the '885 Patent, Google supplies in or from the  
23 United States software components for performing the accused functionality as part of firmware  
24 updates for Cast-enabled media players, and users install such a firmware update outside of the  
25 United States in a manner that, if done within the United States, would constitute “mak[ing]” an  
26 infringing device and thereby directly infringe claims 1-3, 5-10, 12-14 of the '885 Patent under 35  
27 U.S.C. § 271(a). The software components included in the firmware updates are material  
28 components of the patented invention that are not staple articles or commodities of commerce

1 suitable for substantial noninfringing use because the only possible use for these software  
2 components is to be installed and run on Cast-enabled media players, which constitute infringing  
3 devices.

4 Along with its actual knowledge of the '885 Patent, Google knew (or should have known)  
5 that the software components included in the firmware updates were especially made or adapted  
6 for installation on Cast-enabled media players, and that installation of these software components  
7 by others outside the United States would, if done within the United States, have resulted in (and  
8 continues to result in) direct infringement of the '885 Patent under 35 U.S.C. § 271(a) because  
9 each such installation “makes” an updated player that meets every element of every asserted  
10 claims.

11 Moreover, as a result of Google providing such firmware updates others have outside of  
12 the United States combined the firmware updates in a manner that, if done within the United  
13 States, would constitute direct infringement of claims 1-3, 5-10, 12-14 of the '885 Patent . For  
14 example, users have, outside of the United States, installed the supplied software components  
15 included as part of the firmware updates onto Cast-enabled media players outside the United  
16 States, which if done within the United States would constitute “making” updated Cast-enabled  
17 media players, which constitutes direct infringement.

18 As another example, Google provides firmware to manufacturers, third-party distributors,  
19 or an otherwise affiliated entity that acts in a manufacturer or distributor role, who then, outside  
20 of the United States installs or loads such firmware onto Cast-enabled media players. If this  
21 combination were done within the United States, that act would constitute “mak[ing]” an  
22 infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the '885  
23 Patent under 35 U.S.C. § 271(a).

24 **C. Infringement Claim Charts Pursuant to Patent L.R. 3-1(c)**

25 Based on the information currently in its possession, Sonos provides the following  
26 exhibits attached hereto, which specify where each limitation of each asserted claim is found  
27 within each Accused Instrumentality (whether literally or under the Doctrine of Equivalents):

28 Exhibit A: Infringement of '615 Patent

1        Exhibit B: Infringement of '033 Patent

2        Exhibit C: Infringement of '966 Patent

3        Exhibit D: Infringement of '885 Patent

4        Sonos has not yet been provided with full discovery of Google's products, including non-  
5 public documentation sufficiently describing the Accused Instrumentalities, sufficient written  
6 discovery responses from Google, and testimony from Google's witnesses. Thus, Sonos  
7 expressly reserves its right to amend and/or supplement these assertions or to asserted additional  
8 claims for infringement under Patent L.R. 3-6 as discovery in this case progresses or as otherwise  
9 permitted by the Court.

10        **D. Identification of Indirect Infringement Pursuant to Patent L.R. 3-1(d)**

11        Based on the information currently in its possession, Sonos contends that Google is liable  
12 for indirect infringement of each of the Asserted Claims under 35 U.S.C. §§ 271(b), (c), and (f).  
13 Sonos has identified the acts of direct infringement and provided a description of Google's own  
14 acts that contribute to and induce such direct infringement above (§§ I.B.ii-v), as well as in  
15 Sonos's Amended Complaint, which is herein incorporated by reference in its entirety.

16        **E. Identification of Types of Infringement Pursuant to Patent L.R. 3-1(e)**

17        Based on the information currently in its possession, Sonos contends that each limitation  
18 of each Asserted Claim is literally met by the Accused Instrumentalities. To date, Google has not  
19 set forth any interpretation of any claim limitation or any non-infringement position that  
20 circumvents literal infringement of the Asserted Claims. To the extent that Google offers any  
21 such interpretation or non-infringement position, Sonos expressly reserves the right to supplement  
22 its infringement contentions, such as with applicable contentions under the Doctrine of  
23 Equivalents.

24        **F. Identification of Priority Dates Pursuant to Patent L.R. 3-1(f)**

25        Sonos contends that: (a) each Asserted Claim of the '615 Patent is entitled to a priority  
26 date no later than December 30, 2011; (b) each Asserted Claim of the '033 Patent is entitled to a  
27 priority date no later than December 30, 2011; (c) each Asserted Claim of the '966 Patent is  
28

entitled to a priority date no later than September 12, 2006; and (d) each Asserted Claim of the '885 Patent is entitled to a priority date no later than September 12, 2006.

**G. Identification of Practicing Instrumentalities Pursuant to Patent L.R. 3-1(g)**

Pursuant to L.R. 3-1(g), Sonos states that the following Sonos products practice one or more claims of the '885 Patent: CONNECT:AMP, CONNECT, PLAY:3, PLAYBAR, PLAY:1, PLAY:5 (gen 2), PLAYBASE, ONE, BEAM, AMP, SYMFONISK (Bookshelf), SYMFONISK (Table Lamp), ONE SL, PORT, MOVE, ARC, FIVE, ROAM.

Sonos further states that a computing device (e.g., smartphone, tablet, etc.) or other computer-readable medium (CRM) provisioned with Sonos's "S2" controller app, which was launched June 8, 2020, practice the claimed inventions of the '966 Patent.

Although Sonos is not aware of any Sonos product that practices the claimed inventions of the '615 and '033 Patents and thus no response is required by L.R. 3-1(g), Sonos states that a computing device (e.g., smartphone, tablet, etc.) or other CRM provisioned with certain third-party streaming-media apps that are Sonos "Direct Control" enabled, such as the Spotify app, practice the claimed inventions of the '615 and '033 Patents.

**H. Identification of First Infringement & Damages Period Pursuant to Patent L.R. 3-1(h)**

Based on the information currently in its possession, Sonos contends that Google's infringement of the Asserted Patents began at least as early as the dates set forth below. To Sonos's knowledge, Google's infringement remains ongoing and the damages period likewise remains ongoing.

U.S. Patent No.	Date of First Infringement & Start of Damages Period
9,967,615	At least as early as May 8, 2018
10,779,033	At least as early as September 15, 2020
10,469,966	At least as early as November 5, 2019
10,848,885	At least as early as November 24, 2020

Discovery is ongoing and Sonos has sought information that is in Google's possession, custody, or control, regarding designs of the Accused Instrumentalities and the timing of each design. Sonos reserves the right to supplement its Infringement Contentions based on Google's proper discovery responses. Sonos further reserves its right to amend and/or modify its

Infringement Contentions as discovery in this case progresses, under Patent L.R. 3-6, or as otherwise permitted by the Court.

**I. Identification of Willful Infringement Bases Pursuant to Patent L.R. 3-1(i)**

Sonos contends that Google has willfully infringed, and continues willfully infringing, each asserted claim of each Asserted Patent. The bases for this contention are set forth in Sonos's Objections and Responses to Google LLC's First Set of Interrogatories (Nos. 9 and 14), the contents of which are herein incorporated by reference. *See* Sonos, Inc.'s Objections and Responses to Google LLC's First Set of Interrogatories (Nos. 1-20) (dated September 7, 2021).

Moreover, discovery that Google has not yet produced may provide additional evidence that shows Google has willfully infringed the Asserted Patents. Sonos therefore reserves its right to amend and/or modify its willful infringement contentions as discovery in this case progresses, under Patent L.R. 3-6, or as otherwise permitted by the Court.

**II. Document Production & Accompanying Disclosure**

**A. Documents Pursuant to Patent L.R. 3-2(a)**

Sonos is currently not aware of any documents specified by Patent L.R. 3-2(a). To the extent any such document exists, however, Sonos will use its best efforts to obtain all responsive documents and reserves its right to supplement its production as discovery in this case progresses, under Patent L.R. 3-6, or as otherwise permitted by the Court.

**B. Documents Pursuant to Patent L.R. 3-2(b)**

Pursuant to Patent L.R. 3-2(b), Sonos has produced documents bearing production numbers SONOS-SVG2-00026244 through SONOS-SVG2-00027721 and SONOS-SVG2-00042660 through SONOS-SVG2-00042698.

**C. Documents Pursuant to Patent L.R. 3-2(c)**

Pursuant to Patent L.R. 3-2(c), Sonos has produced documents bearing production numbers SONOS-SVG2-00000001 through SONOS-SVG2-00000754 and SONOS-SVG2-00001167 through SONOS-SVG2-00017989.

**D. Documents Pursuant to Patent L.R. 3-2(d)**

Pursuant to Patent L.R. 3-2(d), Sonos has produced documents bearing production numbers SONOS-SVG2-00042892 through SONOS-SVG2-00042904.

**E. Documents Pursuant to Patent L.R. 3-2(e)**

Pursuant to Patent L.R. 3-2(e), Sonos has produced documents bearing production numbers SONOS-SVG2-00042699 through SONOS-SVG2-00042891 and SONOS-SVG2-00042946 through SONOS-SVG2-00042952. Sonos is also making available for inspection Sonos source code that demonstrates the operation of the Sonos products identified above pursuant to L.R. 3-1(g).

Moreover, Sonos is in possession of certain additional documents that may fall under Patent L.R. 3-2(e) but such documents contain information that is subject to third-party confidentiality obligations. Sonos is endeavoring to comply with these confidentiality obligations and will produce these certain additional documents as soon as Sonos is permitted pursuant to the third-party confidentiality obligations.

**F. Documents Pursuant to Patent L.R. 3-2(f)**

Although Sonos is not aware of any agreements that transfer any ownership interest in the Asserted Patents, for the avoidance of doubt, Sonos has produced certain non-exclusive patent license agreements and covenants not to sue bearing production numbers SONOS-SVG2-00042905 through SONOS-SVG2-00042944. Sonos is in possession of certain additional non-exclusive patent license agreements and covenants not to sue but is prohibited from producing such agreements pursuant to third-party confidentiality obligations.

Moreover, Sonos herein incorporates by reference Sonos's Objections and Responses to Google LLC's First Set of Interrogatories (No. 13). *See* Sonos, Inc.'s Objections and Responses to Google LLC's First Set of Interrogatories (Nos. 1-20) (dated September 7, 2021).

**G. Documents Pursuant to Patent L.R. 3-2(g)**

Sonos states that it has covenanted not to sue DEI Sales, Inc., and subsidiaries that existed as of May 17, 2018, for patent infringement, granted a patent license to Lenbrook Industries Limited and relevant subsidiaries on July 28, 2020, and granted a patent license to Pass & Seymour, Inc. on December 7, 2020.

1 Pursuant to Patent L.R. 3-2(g), Sonos states that it has produced the Lenbrook Industries  
2 Limited and Pass & Seymour, Inc. agreements at SONOS-SVG2-00042905 through SONOS-  
3 SVG2-00042944. The DEI Sales, Inc. agreement is subject to third-party confidentiality  
4 obligations and, after inquiry, Sonos is unable to produce this agreement subject to those  
5 obligations.

6 **H. Documents Pursuant to Patent L.R. 3-2(h)**

7 Pursuant to Patent L.R. 3-2(h), Sonos incorporates its response regarding L.R. 3-2(f) and  
8 L.R. 3-2(g).

9 **I. Documents Pursuant to Patent L.R. 3-2(i)**

10 Pursuant to Patent L.R. 3-2(i), Sonos has produced a document bearing production  
11 number SONOS-SVG2-00042945.

12 **J. Documents Pursuant to Patent L.R. 3-2(j)**

13 Sonos is currently not aware of any documents specified by Patent L.R. 3-2(j). To the  
14 extent any such document exists, however, Sonos will use its best efforts to obtain all responsive  
15 documents and reserves its right to supplement its production as discovery in this case progresses,  
16 under Patent L.R. 3-6, or as otherwise permitted by the Court.

1 Dated: January 20, 2022

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*Attorney for Sonos, Inc.*

# Appendix 1

Model	Developer
Iconia A500	Acer
Iconia A510	Acer
Iconia A700	Acer
Iconia W510	Acer
Iconia W700	Acer
Iconia A701	Acer
Chromebook Spin (all versions)	Acer
Chromebook Touch (all versions)	Acer
Aspire (all versions)	Acer
Enduro (all versions)	Acer
Extensa (all versions)	Acer
Ferrari (all versions)	Acer
Nitro (all versions)	Acer
Predator (all versions)	Acer
Swift (all versions)	Acer
Spin (all versions)	Acer
Switch (all versions)	Acer
TravelMate (all versions)	Acer
Novo7 Aurora II	Ainol
Novo7 Flame	Ainol
Amazon Fire Phone	Amazon
Kindle Fire	Amazon
Kindle Fire HD	Amazon
Kindle Fire HDX	Amazon
iPhone 4	Apple
iPhone 4S	Apple
iPhone 5	Apple
iPhone 5C	Apple
iPhone 5S	Apple
iPhone 6	Apple
iPhone 6 Plus	Apple
iPhone 6S	Apple
iPhone 6S Plus	Apple
iPhone SE	Apple
(1st generation)	Apple
iPhone 7	Apple
iPhone 7 Plus	Apple
iPhone 8	Apple
iPhone 8 Plus	Apple
iPhone X	Apple
iPhone XR	Apple
iPhone XS	Apple
iPhone XS Max	Apple
iPhone 11	Apple
iPhone 11 Pro	Apple
iPhone 11 Pro Max	Apple
iPhone SE	Apple
(2nd generation)	Apple
iPhone 12	Apple
iPhone 12 Mini	Apple
iPhone 12 Pro	Apple
iPhone 12 Pro Max	Apple
iPhone 13	Apple
iPhone 13 Mini	Apple
iPhone 13 Pro	Apple
iPhone 13 Pro Max	Apple
iPad (1st generation)	Apple
iPad 2	Apple
iPad (3rd generation)	Apple
iPad (4th generation)	Apple
iPad (5th generation)	Apple
iPad (6th generation)	Apple
iPad (7th generation)	Apple
iPad (8th generation)	Apple
iPad (9th generation)	Apple
iPad Air (1st generation)	Apple
iPad Air 2	Apple
iPad Air (3rd generation)	Apple
iPad Air (4th generation)	Apple
iPad Pro 12.9-in. (1st generation)	Apple
iPad Pro 9.7-in.	Apple
iPad Pro 12.9-in. (2nd generation)	Apple
iPad Pro 10.5-in.	Apple
iPad Pro 12.9-in. (3rd generation)	Apple
iPad Pro 11-in. (1st generation)	Apple
iPad Pro 12.9-in. (4th generation)	Apple
iPad Pro 11-in. (2nd generation)	Apple

iPad Pro 12.9-in. (5th generation)	Apple
iPad Pro 11-in. (3rd generation)	Apple
MacBook (all versions)	Apple
MacBook Air (all versions)	Apple
MacBook Pro (all versions)	Apple
80 G9 HDD	Archos
80 G9 SSD	Archos
97 Titanium HD	Archos
101 XS	Archos
Arirang (original)	Arirang
Arirang 171	Arirang (smartphone)
Asus PadFone	Asus
Asus PadFone 2	Asus
Asus PadFone Infinity	Asus
Asus PadFone Infinity 2	Asus
Asus PadFone mini	Asus
Asus PadFone E	Asus
Asus PadFone Infinity Lite	Asus
Asus ZenFone 5 (2014)	Asus
Asus ZenFone 4 (2014)	Asus
Asus ZenFone 6 (2014)	Asus
Asus PadFone S/X	Asus
Asus ZenFone 4.5 (2014)	Asus
Asus ZenFone 5 (2014)	Asus
Asus PadFone X mini	Asus
Asus Pegasus (X002)	Asus
Asus ZenFone 5 (2015)	Asus
Asus ZenFone 2	Asus
Asus ZenFone 3	Asus
Asus ZenFone 4	Asus
Asus ZenFone Max Plus M1	Asus
Asus ZenFone Max M1	Asus
Asus ZenFone Max Pro M1	Asus
Asus ZenFone 5	Asus
Asus ZenFone Live L1	Asus
Asus ROG Phone	Asus
Asus ZenFone Lite L1	Asus
Asus ZenFone Max M2	Asus
Asus ZenFone Max Pro M2	Asus
Asus ZenFone Max Shot	Asus
Asus ZenFone Max Plus M2	Asus
Asus ZenFone Live L2	Asus
Asus ZenFone 6	Asus
Asus ROG Phone II	Asus
Asus ROG Phone 3	Asus
Asus ZenFone 7	Asus
Asus ROG Phone 5	Asus
Asus ZenFone 8	Asus
Eee Pad Transformer TF101	Asus
Eee Pad Transformer Prime	Asus
PadFone 2	Asus
Transformer Pad TF300	Asus
Transformer Pad Infinity TF700T	Asus
Transformer Pad Infinity LTE TF700KL	Asus
Transformer Pad TF701T	Asus
Transformer Book T100	Asus
VivoTab	Asus
Google Nexus 7	Asus
Chromebook Flip (all versions)	Asus
Chromebook (all versions)	Asus
ExpertBook (all versions)	Asus
Pro (all versions)	Asus
ProArt (all versions)	Asus
ROG (all versions)	Asus
Transformer (all versions)	Asus
TUF (all versions)	Asus
VivoBook (all versions)	Asus
ZenBook (all versions)	Asus
Nook Tablet	Barnes & Noble
Nook HD+	Barnes & Noble
BlackBerry Priv	BlackBerry Limited
BlackBerry DTEK50	BlackBerry Limited
BlackBerry DTEK60	BlackBerry Limited
BlackBerry Aurora	BlackBerry Mobile
BlackBerry KeyOne	BlackBerry Mobile
BlackBerry Motion	BlackBerry Mobile
BlackBerry Key2	BlackBerry Mobile
BlackBerry Evolve/X	BlackBerry Mobile

BlackBerry Key2 LE	BlackBerry Mobile
BoringPhone	BoringPhone
Cherry Mobile Flare S8 Deluxe	Cherry Mobile
Cherry Mobile Flare S8 Pro	Cherry Mobile
Cherry Mobile Flare S8 Plus	Cherry Mobile
Cherry Mobile Flare S8 Lite	Cherry Mobile
Steak 7	Dell
Inspiron Chromebooks (all versions)	Dell
Latitude Chromebooks (all versions)	Dell
Alienware (all versions)	Dell
G Series (all versions)	Dell
Inspiron (all versions)	Dell
Latitude (all versions)	Dell
Precision (all versions)	Dell
Vostro (all versions)	Dell
XPS (all versions)	Dell
OptiPlex (all versions)	Dell
Essential PH-1	Essential Products
Fairphone 1	FairPhone
Fairphone 2	FairPhone
Fairphone 3	FairPhone
Fairphone 3+	FairPhone
Fairphone 4	FairPhone
Freedom Phone	Freedom Phone
Nabi 2	Fuhu
Pixel/XL	Google
Pixel 2/XL	Google
Pixel 3/XL	Google
Pixel 3a/XL	Google
Pixel 4/XL	Google
Pixel 4a	Google
Pixel 4a (5G)	Google
Pixel 5	Google
Pixel 5a	Google
Pixel 6/Pro	Google
Chromebook Pixel	Google
Pixelbook	Google
Pixelbook Go	Google
Slate	Google
Goophone X	Goophone
Goophone i5C	Goophone
Goophone i5S	Goophone
Goophone i6	Goophone
Goophone i5	Goophone
Goophone 12 Pro	Goophone
Nokia 6	HMD Global
Nokia 3	HMD Global
Nokia 5	HMD Global
Nokia 7	HMD Global
Nokia 8	HMD Global
Nokia 2	HMD Global
Nokia 7 Plus	HMD Global
Nokia 1	HMD Global
Nokia 6.1	HMD Global
Nokia 8 Sirocco	HMD Global
Nokia 3.1	HMD Global
Nokia 5.1 Plus	HMD Global
Nokia 2.1	HMD Global
Nokia 5.1	HMD Global
Nokia 6.1 Plus	HMD Global
Nokia 3.1 Plus	HMD Global
Nokia 7.1	HMD Global
Nokia 8.1	HMD Global
Nokia 9 PureView	HMD Global
Nokia 1 Plus	HMD Global
Nokia 4.2	HMD Global
Nokia 3.2	HMD Global
Nokia 2.2	HMD Global
Nokia 6.2	HMD Global
Nokia 7.2	HMD Global
Nokia 2.3	HMD Global
Nokia C1	HMD Global
Nokia C2	HMD Global
Nokia 1.3	HMD Global
Nokia 5.3	HMD Global
Nokia C2 Tava	HMD Global
Nokia C5 Endi	HMD Global
Nokia C2 Tennen	HMD Global

Nokia C3	HMD Global
Nokia 2.4	HMD Global
Nokia 3.4	HMD Global
Nokia C1 Plus	HMD Global
Nokia 5.4	HMD Global
Nokia 1.4	HMD Global
Nokia C20	HMD Global
Nokia G10	HMD Global
Nokia G20	HMD Global
Nokia X20	HMD Global
Nokia C10	HMD Global
Nokia X10	HMD Global
Nokia C01 Plus	HMD Global
Nokia C20 Plus	HMD Global
Nokia C30	HMD Global
Nokia XR20	HMD Global
Honor V40	Honor
Honor V40 Lite	Honor
Honor Play 5T Youth	Honor
Honor Play 20	Honor
Honor Play 5	Honor
Honor 50/Pro	Honor
Honor 50 SE	Honor
Honor X20 SE	Honor
Honor Play 5T Pro	Honor
Honor Magic3/Pro/Pro+	Honor
Honor X20	Honor
Honor Play 5 Youth	Honor
Honor 50 Lite	Honor
Honor X30 Max/X30i	Honor
Honor 60/Pro	Honor
Honor X30	Honor
Honor Play 30 Plus	Honor
Mediapad 10 FHD	Honor
HP Chromebook (all versions)	HP
HP Pro Chromebook (all versions)	HP
HP Elite (all versions)	HP
Compaq (all versions)	HP
Elitebook (all versions)	HP
Envy (all versions)	HP
Omen (all versions)	HP
Pavillion (all versions)	HP
ZBook (all versions)	HP
Spectre (all versions)	HP
Victus (all versions)	HP
ProBook (all versions)	HP
OmniBook (all versions)	HP
HTC Magic	HTC
HTC Hero	HTC
HTC Tattoo	HTC
HTC Desire	HTC
HTC Legend	HTC
HTC Droid Incredible	HTC
HTC Wildfire	HTC
HTC Aria	HTC
HTC Evo 4G	HTC
HTC Evo 4G+	HTC
HTC Desire HD	HTC
HTC Desire Z	HTC
HTC Gratia	HTC
HTC Evo Shift 4G	HTC
HTC Inspire 4G	HTC
HTC Incredible S	HTC
HTC ThunderBolt	HTC
HTC Desire S	HTC
HTC Merge	HTC
HTC Sensation	HTC
HTC Wildfire S	HTC
HTC ChaCha	HTC
HTC Salsa	HTC
HTC Evo 3D	HTC
HTC Amaze 4G	HTC
HTC Explorer	HTC
HTC Sensation XE	HTC
HTC Rhyme	HTC
HTC Raider 4G	HTC
HTC Evo Design 4G	HTC
HTC Sensation XL	HTC

HTC Rezound	HTC
HTC One S	HTC
HTC One V	HTC
HTC One X/XL	HTC
HTC Evo 4G LTE	HTC
HTC One S C2	HTC
HTC Desire C	HTC
HTC Desire V	HTC
HTC Droid Incredible 4G LTE	HTC
HTC Desire VC	HTC
HTC Desire XC	HTC
HTC One XC	HTC
HTC J	HTC
HTC Desire VT	HTC
HTC Desire X	HTC
HTC One VX	HTC
HTC One X+	HTC
HTC Desire SV	HTC
HTC Desire 400	HTC
HTC One SV	HTC
HTC Butterfly	HTC
HTC One (M7)	HTC
HTC First	HTC
HTC Desire L/P/Q	HTC
HTC Desire U	HTC
HTC Desire 600	HTC
HTC Desire 200	HTC
HTC Butterfly S	HTC
HTC One Mini	HTC
HTC Desire 500	HTC
HTC One Max	HTC
HTC Desire 601	HTC
HTC Desire 300	HTC
HTC Desire 601 dual sim	HTC
HTC Desire 700	HTC
HTC Desire 501	HTC
HTC Desire 816	HTC
HTC One (M8)	HTC
HTC Desire 310	HTC
HTC Desire 610	HTC
HTC Desire 816 dual sim	HTC
HTC One Mini 2	HTC
HTC Desire 210	HTC
HTC Desire 616	HTC
HTC One (E8)	HTC
HTC Desire 516	HTC
HTC One Remix	HTC
HTC Butterfly 2	HTC
HTC Desire 510	HTC
HTC Desire 820q	HTC
HTC Desire 612	HTC
HTC One (M8 Eye)	HTC
HTC Desire 816G	HTC
HTC Desire 820	HTC
HTC Desire Eye	HTC
HTC Desire 620/G	HTC
HTC Desire 320	HTC
HTC Desire 526G+	HTC
HTC Desire 826	HTC
HTC Desire 626	HTC
HTC Desire 820s	HTC
HTC Desire 626G+	HTC
HTC One M9	HTC
HTC One E9/+	HTC
HTC One M8s	HTC
HTC One M9+	HTC
HTC Desire 326G	HTC
HTC Desire 820G+	HTC
HTC One ME	HTC
HTC Desire 626s	HTC
HTC Desire 526	HTC
HTC Desire 626 (USA)	HTC
HTC One M9+ Supreme Camera Edition	HTC
HTC Butterfly 3	HTC
HTC One E9s	HTC
HTC One A9	HTC
HTC Desire 520	HTC
HTC Desire 728	HTC

HTC Desire 828	HTC
HTC One M9s	HTC
HTC One X9	HTC
HTC Desire 530	HTC
HTC Desire 825	HTC
HTC 10	HTC
HTC Desire 830	HTC
HTC One M9 Prime Camera	HTC
HTC Desire 630	HTC
HTC 10 Lifestyle	HTC
HTC One S9	HTC
HTC Desire 628	HTC
HTC Desire 625	HTC
HTC Desire 10 Lifestyle	HTC
HTC Desire 728 Ultra	HTC
HTC One A9s	HTC
HTC 10 evo	HTC
HTC Desire 10 Pro	HTC
HTC Desire 650	HTC
HTC U Play	HTC
HTC U Ultra	HTC
HTC U11	HTC
HTC One X10	HTC
HTC U11+/Life	HTC
HTC U11 EYEs	HTC
HTC U12+	HTC
HTC U12 life	HTC
HTC Desire 12/12+	HTC
HTC Exodus 1	HTC
HTC Desire 12s	HTC
HTC Desire 19+	HTC
HTC U19e	HTC
HTC Wildfire X	HTC
HTC Exodus 1s	HTC
HTC Desire 19s	HTC
HTC Wildfire R70	HTC
HTC Desire 20 Pro	HTC
HTC Wildfire E2	HTC
HTC U20 5G	HTC
HTC Desire 20+	HTC
HTC Desire 21 Pro	HTC
HTC Wildfire E3	HTC
Flyer	HTC
Google Nexus 9	HTC
Nexus One	HTC/Google
Honor U8860	Huawei
Honor 2	Huawei
Honor 3	Huawei
Honor 3C	Huawei
Honor 3X	Huawei
Honor 3X Pro	Huawei
Honor 3C 4G	Huawei
Honor 6	Huawei
Honor 3C Play	Huawei
Honor 4 Play	Huawei
Honor Holly	Huawei
Honor 4X	Huawei
Honor 6 Plus	Huawei
Honor 4C	Huawei
Honor Bee	Huawei
Honor 7	Huawei
Honor 7i	Huawei
Honor 5X	Huawei
Honor Holly 2 Plus	Huawei
Honor 5c	Huawei
Honor V8	Huawei
Honor 5A	Huawei
Honor 8	Huawei
Honor Note 8	Huawei
Honor Holly 3	Huawei
Honor 6X	Huawei
Honor Magic	Huawei
Honor 8 Pro	Huawei
Honor 6A	Huawei
Honor 9	Huawei
Honor 6C Pro	Huawei
Honor 7X	Huawei
Honor V10	Huawei



Honor 9 Lite	Huawei
Honor 7A	Huawei
Honor 7C	Huawei
Honor 10	Huawei
Honor 7S	Huawei
Honor 9N	Huawei
Honor Play	Huawei
Honor Note 10	Huawei
Honor 8X/Max	Huawei
Honor 8C	Huawei
Honor Magic 2/3D	Huawei
Honor 10 Lite	Huawei
Honor V20	Huawei
Honor Play 8A	Huawei
Honor 8A Pro	Huawei
Honor 20 lite	Huawei
Honor 20i	Huawei
Honor 20	Huawei
Honor 20 Pro	Huawei
Honor 9X (China)	Huawei
Honor 9X Pro	Huawei
Honor Play 3/3e	Huawei
Honor 20S	Huawei
Honor 20 lite (China)	Huawei
Honor 9X	Huawei
Honor V30/30 Pro	Huawei
Honor 8A Prime	Huawei
Honor Play 9A	Huawei
Honor 30S	Huawei
Honor Play 4T/Pro	Huawei
Honor 8A 2020	Huawei
Honor 20e	Huawei
Honor 30/Pro/Pro+	Huawei
Honor 9X Lite	Huawei
Honor 9C/9S/9A	Huawei
Honor X10	Huawei
Honor 8S 2020	Huawei
Honor Play4/Pro	Huawei
Honor 30 Lite	Huawei
Honor X10 Max	Huawei
Honor 30i	Huawei
Honor 10X Lite	Huawei
Huawei U8230	Huawei
Huawei U8100	Huawei
Huawei IDEOS	Huawei
Huawei IDEOS X5	Huawei
Huawei Sonic	Huawei
Huawei Ascend P1	Huawei
Huawei STREAM X GL07S	Huawei
Huawei Ascend Mate	Huawei
Huawei Ascend P2	Huawei
Huawei Ascend P6	Huawei
Huawei Ascend Mate 2 4G	Huawei
Huawei Ascend P7	Huawei
Huawei Enjoy 7 Plus	Huawei
Huawei Ascend Mate 7	Huawei
Huawei P8	Huawei
Huawei Mate S	Huawei
Huawei Mate 8	Huawei
Huawei P9	Huawei
Huawei Nova/Plus	Huawei
Huawei Mate 9	Huawei
Huawei P10	Huawei
Huawei Nova 2/Plus	Huawei
Huawei Mate 10 Lite	Huawei
Huawei Mate 10	Huawei
Huawei P20	Huawei
Huawei Nova 3i/P Smart+	Huawei
Huawei Nova 3	Huawei
Huawei Mate 20	Huawei
Huawei Nova 4	Huawei
Huawei Nova 4e	Huawei
Huawei P30	Huawei
Huawei P30 lite	Huawei
Huawei Nova 5/Si/Pro	Huawei
Huawei Nova 5i Pro	Huawei
Huawei Nova 5T	Huawei
Huawei Mate 30	Huawei

Huawei Nova 5z	Huawei
Huawei Nova 6/5G/SE	Huawei
Huawei Y7p	Huawei
Huawei Nova 7i	Huawei
Huawei P40 lite	Huawei
Huawei P40 lite E	Huawei
Huawei P40	Huawei
Huawei Nova 7/Pro/SE	Huawei
Huawei P40 lite 5G	Huawei
Huawei Nova 7 SE 5G Youth	Huawei
Huawei Mate 40	Huawei
Huawei Nova 8 SE	Huawei
Huawei Nova 8 5G/Pro	Huawei
Huawei Mate X2	Huawei
Huawei Nova 8 Pro 4G	Huawei
Huawei Nova 8i	Huawei
Huawei Nova 8 SE Youth	Huawei
Huawei Nova 9	Huawei
Huawei Enjoy 20e	Huawei
Ideos Tablet S7	Huawei
MateBook (all versions)	Huawei
Nexus 6P	Huawei/Google
Arc 10 HD	Kobo
Arc 10 HD	Kobo
Kodak Ektra (phone)	Kodak
Lenovo P780	Lenovo
Lenovo Vibe Z	Lenovo
Lenovo A526	Lenovo
Lenovo Vibe Z2 Pro	Lenovo
Lenovo Vibe Z2	Lenovo
ZUK Z1	Lenovo
Lenovo Vibe P1	Lenovo
Lenovo Vibe K4 Note	Lenovo
Lenovo K5 Note	Lenovo
Lenovo Vibe P1 Turbo	Lenovo
Lenovo Vibe K5/Plus	Lenovo
ZUK Z2	Lenovo
Lenovo Phab 2/Plus/Pro	Lenovo
Lenovo K6/Power/Note	Lenovo
Lenovo P2	Lenovo
Lenovo Z2 Plus	Lenovo
Lenovo Legion Pro	Lenovo
Lenovo Legion Duel	Lenovo
Lenovo Legion 2 Pro	Lenovo
Lenovo Legion Duel 2	Lenovo
IdeaTab S2110	Lenovo
IdeaPad Yoga	Lenovo
IdeaPad K1	Lenovo
Thinkpad	Lenovo
Thinkpad Tablet 2	Lenovo
IdeaPad (all versions)	Lenovo
Legion (all versions)	Lenovo
ThinkPad (all versions)	Lenovo
ThinkBook (all versions)	Lenovo
Yoga (all versions)	Lenovo
Optimus Pad	LG
Optimus Pad LTE	LG
Tab-Book	LG
G Pad 8.3	LG
Gram (all versions)	LG
Xnote (all versions)	LG
LG GW620	LG Electronics
LG Optimus Q	LG Electronics
LG Optimus	LG Electronics
LG Optimus One	LG Electronics
LG Optimus Chic	LG Electronics
LG Optimus 2X	LG Electronics
LG Optimus Black	LG Electronics
LG Optimus 3D	LG Electronics
LG Optimus Slider	LG Electronics
LG Optimus LTE (LU6200)	LG Electronics
LG Optimus 4X HD	LG Electronics
LG Optimus LTE (SU640)	LG Electronics
LG Optimus L9	LG Electronics
LG Optimus Vu	LG Electronics
LG Optimus G	LG Electronics
LG G2	LG Electronics
LG G Flex	LG Electronics

LG G Pro Lite	LG Electronics
LG Gx	LG Electronics
LG G2 Mini	LG Electronics
LG G Pro 2	LG Electronics
LG G3	LG Electronics
LG G3 Stylus	LG Electronics
LG G Flex 2	LG Electronics
LG G4	LG Electronics
LG V10	LG Electronics
LG K10 (2016)	LG Electronics
LG G5	LG Electronics
LG V20	LG Electronics
LG K10 (2017)	LG Electronics
LG G6	LG Electronics
LG V30	LG Electronics
LG G7 ThinQ	LG Electronics
LG V35 ThinQ	LG Electronics
LG K10 (2018)	LG Electronics
LG V40 ThinQ	LG Electronics
LG G8 ThinQ	LG Electronics
LG V50 ThinQ	LG Electronics
LG Stylo 5	LG Electronics
LG W10/W30	LG Electronics
LG W30 Pro	LG Electronics
LG W10 Alpha	LG Electronics
LG Q51	LG Electronics
LG V60 ThinQ	LG Electronics
LG Velvet	LG Electronics
LG Stylo 6	LG Electronics
LG Q61	LG Electronics
LG K31	LG Electronics
LG Q92 5G	LG Electronics
LG K22	LG Electronics
LG K42/K71	LG Electronics
LG Q31	LG Electronics
LG Wing	LG Electronics
LG Q52	LG Electronics
LG K52/K62	LG Electronics
LG K92 5G	LG Electronics
LG W31/+	LG Electronics
LG W41/+Pro	LG Electronics
Nexus 4	LG Electronics/Google
Nexus 5	LG Electronics/Google
Nexus 5X	LG Electronics/Google
Marshall London	Marshall Amplification
Meizu M9	Meizu
Meizu MX	Meizu
Meizu MX 4-core	Meizu
Meizu MX2	Meizu
Meizu MX3	Meizu
Meizu MX4	Meizu
Meizu MX4 Pro	Meizu
Meizu M1/1 Note	Meizu
Meizu M2 Note	Meizu
Meizu MX5	Meizu
Meizu M2	Meizu
Meizu PRO 5	Meizu
Meizu M1 Metal	Meizu
Meizu MX5e	Meizu
Meizu M3 Note	Meizu
Meizu PRO 6	Meizu
Meizu M3	Meizu
Meizu M3s	Meizu
Meizu MX6	Meizu
Meizu M3E	Meizu
Meizu U10/20	Meizu
Meizu M3 Max	Meizu
Meizu M5	Meizu
Meizu PRO 6s	Meizu
Meizu M3x	Meizu
Meizu PRO 6 Plus	Meizu
Meizu M5 Note	Meizu
Meizu M5s	Meizu
Meizu E2	Meizu
Meizu M5c	Meizu
Meizu PRO 7/Plus	Meizu
Meizu M6 Note	Meizu
Meizu M6	Meizu

Meizu M6s	Meizu
Meizu E3	Meizu
Meizu 15/Pro/Lite	Meizu
Meizu M8c	Meizu
Meizu M6T	Meizu
Meizu 16th/Plus	Meizu
Meizu 16X	Meizu
Meizu V8/Pro	Meizu
Meizu X8	Meizu
Meizu Note 8	Meizu
Meizu C9/Pro	Meizu
Meizu Note 9	Meizu
Meizu M10	Meizu
Meizu 16s	Meizu
Meizu 16Xs	Meizu
Meizu 16s Pro	Meizu
Meizu 16T	Meizu
Meizu 17/Pro	Meizu
Meizu 18/Pro	Meizu
Meizu 18s/Pro	Meizu
Meizu 18X	Meizu
Surface Duo	Microsoft
Surface Pro	Microsoft
Surface RT	Microsoft
Surface (all versions)	Microsoft
Nokia XL	Microsoft Mobile
Nokia X2	Microsoft Mobile
Motorola Phone MP1	Motorola
Motorola Cliq	Motorola
Motorola Droid	Motorola
Motorola Backflip	Motorola
Motorola Flipout	Motorola
Motorola Droid X	Motorola
Motorola Charm	Motorola
Motorola Droid 2	Motorola
Motorola Defy	Motorola
Motorola Droid Pro	Motorola
Xoom	Motorola
Droid XYBoard (Xoom 2)	Motorola
Motorola Atrix 4G	Motorola Mobility
Motorola Droid 3	Motorola Mobility
Motorola Droid Bionic	Motorola Mobility
Motorola Atrix 2	Motorola Mobility
Motorola Droid Razr	Motorola Mobility
Motorola Droid 4	Motorola Mobility
Motorola Atrix HD	Motorola Mobility
Motorola Photon Q	Motorola Mobility
Motorola Droid Razr M	Motorola Mobility
Motorola Droid Razr HD	Motorola Mobility
Motorola Droid Maxx	Motorola Mobility
Motorola Droid Mini	Motorola Mobility
Moto X (1st generation)	Motorola Mobility
Moto G (1st generation)	Motorola Mobility
Moto E (1st generation)	Motorola Mobility
Moto G (2nd generation)	Motorola Mobility
Moto X (2nd generation)	Motorola Mobility
Motorola Droid Turbo	Motorola Mobility
Moto E (2nd generation)	Motorola Mobility
Moto G (3rd generation)	Motorola Mobility
Moto X Play	Motorola Mobility
Moto X Style	Motorola Mobility
Moto G4	Motorola Mobility
Moto E3	Motorola Mobility
Moto Z	Motorola Mobility
Moto Z Play	Motorola Mobility
Moto G5	Motorola Mobility
Moto C	Motorola Mobility
Moto E4	Motorola Mobility
Moto Z2 Play	Motorola Mobility
Moto Z2 Force	Motorola Mobility
Moto X4	Motorola Mobility
Moto E5	Motorola Mobility
Moto G6	Motorola Mobility
Moto Z3 Play	Motorola Mobility
Moto Z3	Motorola Mobility
Motorola One/One Power	Motorola Mobility
Moto G7	Motorola Mobility
Motorola One Vision	Motorola Mobility

Moto Z4	Motorola Mobility
Motorola One Zoom	Motorola Mobility
Moto G8 Plus	Motorola Mobility
Motorola One Macro	Motorola Mobility
Motorola One Action	Motorola Mobility
Motorola Razr (4G)	Motorola Mobility
Motorola One Hyper	Motorola Mobility
Moto G8 Power	Motorola Mobility
Moto G Power/Stylus	Motorola Mobility
Moto G8	Motorola Mobility
Moto E6s (2020)	Motorola Mobility
Moto G8 Power Lite	Motorola Mobility
Motorola Edge/Edge+	Motorola Mobility
Moto G Pro	Motorola Mobility
Moto E (2020)	Motorola Mobility
Moto G Fast	Motorola Mobility
Motorola One Fusion+	Motorola Mobility
Motorola One Fusion	Motorola Mobility
Moto G 5G Plus	Motorola Mobility
Moto G9 Play	Motorola Mobility
Moto G9 Plus	Motorola Mobility
Moto E7 Plus	Motorola Mobility
Motorola Razr (5G)	Motorola Mobility
Moto G9 Power	Motorola Mobility
Moto G 5G	Motorola Mobility
Moto E7	Motorola Mobility
Moto G Play (2021)	Motorola Mobility
Moto G Power (2021)	Motorola Mobility
Moto G Stylus (2021)	Motorola Mobility
Moto E6i	Motorola Mobility
Moto E7 Power	Motorola Mobility
Moto G10	Motorola Mobility
Moto G30	Motorola Mobility
Moto G10 Power	Motorola Mobility
Moto G50	Motorola Mobility
Moto G100	Motorola Mobility
Moto G60	Motorola Mobility
Moto G40 Fusion	Motorola Mobility
Moto G20	Motorola Mobility
Moto G Stylus 5G	Motorola Mobility
Motorola Defy (2021)	Motorola Mobility
Moto G50 5G	Motorola Mobility
Moto G60S	Motorola Mobility
Motorola Edge 20	Motorola Mobility
Motorola Edge (2021)	Motorola Mobility
Nexus 6	Motorola Mobility/Google
MyPhone myA1 Plus	MyPhone
MyPhone myA17	MyPhone
MyPhone myP1	MyPhone
Nextbit Robin	Nextbit
Nokia X	Nokia
Shield Tablet	Nvidia
OnePlus One	OnePlus
OnePlus 2	OnePlus
OnePlus X	OnePlus
OnePlus 3	OnePlus
OnePlus 3T	OnePlus
OnePlus 5	OnePlus
OnePlus 5T	OnePlus
OnePlus 6	OnePlus
OnePlus 6T	OnePlus
OnePlus 7/Pro	OnePlus
OnePlus 7T/Pro	OnePlus
OnePlus 8/Pro	OnePlus
OnePlus Nord	OnePlus
OnePlus 8T	OnePlus
OnePlus Nord N10 5G	OnePlus
OnePlus Nord N100	OnePlus
OnePlus 9/Pro	OnePlus
OnePlus Nord CE 5G	OnePlus
OnePlus Nord N200 5G	OnePlus
OnePlus Nord 2 5G	OnePlus
OnePlus 10 Pro	OnePlus
Oppo Finder	Oppo
Oppo Find 5	Oppo
Oppo N1	Oppo
Oppo Find 5 Mini	Oppo
Oppo Neo	Oppo

Oppo Find 7/7a	Oppo
Oppo Joy	Oppo
Oppo N1 mini	Oppo
Oppo Neo 3/5	Oppo
Oppo N3	Oppo
Oppo Joy Plus	Oppo
Oppo Neo 5s	Oppo
Oppo R7	Oppo
Oppo Neo 5 (2015)	Oppo
Oppo Joy 3	Oppo
Oppo Neo 7	Oppo
Oppo F1	Oppo
Oppo R11	Oppo
Oppo F7	Oppo
Oppo R15 Pro	Oppo
Oppo Find X	Oppo
Oppo F9	Oppo
Oppo R17	Oppo
Oppo Reno	Oppo
Oppo Reno2	Oppo
Oppo A9 (2020)	Oppo
Oppo Reno3 5G/Pro 5G	Oppo
Oppo Reno3 Pro	Oppo
Oppo Find X2/Pro	Oppo
Oppo Reno3	Oppo
Oppo Ace2	Oppo
Oppo A12	Oppo
Oppo A52	Oppo
Oppo A72/A92s	Oppo
Oppo Find X2 Lite/Neo	Oppo
Oppo A92	Oppo
Oppo Reno4 5G/Pro 5G	Oppo
Oppo A12s	Oppo
Oppo A72 5G	Oppo
Oppo Reno4/Pro	Oppo
Oppo F17/Pro	Oppo
Oppo Reno4 SE	Oppo
Oppo Reno4 Lite	Oppo
Oppo Reno4 Z 5G	Oppo
Oppo A93/Reno4 F	Oppo
Oppo A73	Oppo
Oppo A73 5G	Oppo
Oppo Reno5 5G/Pro 5G/Pro+ 5G	Oppo
Oppo Reno5	Oppo
Oppo Find X3/Pro	Oppo
Oppo Find X3 Neo/Lite	Oppo
Palm	Palm, Inc.
Panasonic P100	Panasonic
Toughbook (all versions)	Panasonic
Toughpad (all versions)	Panasonic
Pepsi P1/P1S	Pepsi
Q Phone	Qoobex
Edge Pro	Razer
Blade (all versions)	Razer
Razer Phone	Razer Inc.
Razer Phone 2	Razer Inc.
Realme 1	Realme
Realme 2	Realme
Realme C1	Realme
Realme 2 Pro	Realme
Realme U1	Realme
Realme 3	Realme
Realme C2	Realme
Realme 3 Pro	Realme
Realme X	Realme
Realme 3i	Realme
Realme 5	Realme
Realme 5 Pro	Realme
Realme XT	Realme
Realme X2	Realme
Realme X2 Pro	Realme
Realme 5i	Realme
Realme X50	Realme
Realme C3	Realme
Realme X50 Pro	Realme
Realme 6	Realme
Realme 6 Pro	Realme
Realme 6i	Realme

Realme X50 Pro Player	Realme
Realme X3 SuperZoom	Realme
Realme Narzo	Realme
Realme C3i	Realme
Realme X3	Realme
Realme C11	Realme
Realme C15	Realme
Realme V5	Realme
Realme C12	Realme
Realme V3	Realme
Realme X7/Pro	Realme
Realme 7 (Asia)/Pro	Realme
Realme 7i	Realme
Realme C17	Realme
Realme Narzo 20/Pro/20A	Realme
Realme 7 (Global)	Realme
Realme Q2/Pro/2i	Realme
Realme 7 5G	Realme
Realme 7i (Global)	Realme
Realme V15	Realme
Realme C20	Realme
Realme X7 (India)	Realme
Realme V11	Realme
Realme Narzo 30 Pro/30A	Realme
Realme C21	Realme
Realme GT	Realme
Realme C25	Realme
Realme 8/Pro	Realme
Realme V13	Realme
Realme GT Neo	Realme
Realme X7 Pro Ultra	Realme
Realme 8 5G	Realme
Realme Q3/Pro/3i	Realme
Realme C20A	Realme
Realme narzo 30	Realme
Realme GT Neo Flash	Realme
Realme Q3 Pro Carnival	Realme
Realme narzo 30 5G	Realme
Realme X7 Max	Realme
Realme C25s	Realme
Realme C11 2021	Realme
Realme C21Y	Realme
Realme GT Master Edition	Realme
Realme GT Explorer Master Edition	Realme
Realme 8i/8s 5G	Realme
Realme C25Y	Realme
Realme GT Neo2	Realme
Realme V11s	Realme
Realme narzo 50A/50i	Realme
Realme Q3s	Realme
Realme GT Neo2T	Realme
Realme Q3t	Realme
Realme GT2/Pro	Realme
Realme 9i	Realme
Samsung Galaxy	Samsung Electronics
Samsung Galaxy S1	Samsung Electronics
Samsung Galaxy S2	Samsung Electronics
Samsung Galaxy Xcover	Samsung Electronics
Samsung Galaxy Note	Samsung Electronics
Samsung Galaxy Y DUOS	Samsung Electronics
Samsung Galaxy S3	Samsung Electronics
Samsung Galaxy Beam	Samsung Electronics
Samsung Galaxy Note 2	Samsung Electronics
Samsung Galaxy Xcover 2	Samsung Electronics
Samsung Galaxy S4	Samsung Electronics
Samsung Galaxy S4 Zoom	Samsung Electronics
Samsung Galaxy Note 3	Samsung Electronics
Samsung Galaxy Note 3 Neo	Samsung Electronics
Samsung Galaxy S5	Samsung Electronics
Samsung Galaxy Beam 2	Samsung Electronics
Samsung Galaxy Alpha	Samsung Electronics
Samsung Galaxy Grand Prime	Samsung Electronics
Samsung Galaxy Note 4	Samsung Electronics
Samsung Galaxy Note Edge	Samsung Electronics
Samsung Galaxy A5 Duos	Samsung Electronics
Samsung Galaxy A5	Samsung Electronics
Samsung Galaxy A3/Duos	Samsung Electronics
Samsung Galaxy E7	Samsung Electronics

Samsung Galaxy A7/Duos	Samsung Electronics
Samsung Galaxy S6/Edge	Samsung Electronics
Samsung Galaxy Xcover 3	Samsung Electronics
Samsung Galaxy A8/Duos	Samsung Electronics
Samsung Galaxy Note 5	Samsung Electronics
Samsung Galaxy S6 Edge+	Samsung Electronics
Samsung Galaxy A3 (2016)/A5 (2016)/A7 (2016)	Samsung Electronics
Samsung Galaxy A9 (2016)	Samsung Electronics
Samsung Galaxy S7/Edge	Samsung Electronics
Samsung Galaxy Xcover 3 G389F	Samsung Electronics
Samsung Galaxy A9 Pro (2016)	Samsung Electronics
Samsung Galaxy C7	Samsung Electronics
Samsung Galaxy Note 7	Samsung Electronics
Samsung Galaxy A8 (2016)	Samsung Electronics
Samsung Galaxy C9 Pro	Samsung Electronics
Samsung Galaxy A3 (2017)/A5 (2017)/A7 (2017)	Samsung Electronics
Samsung Galaxy Xcover 4	Samsung Electronics
Samsung Galaxy S8/+	Samsung Electronics
Samsung Galaxy Note FE	Samsung Electronics
Samsung Galaxy Note 8	Samsung Electronics
Samsung Galaxy C8	Samsung Electronics
Samsung Galaxy C5	Samsung Electronics
Samsung Galaxy A8 (2018)/+	Samsung Electronics
Samsung Galaxy S9/+	Samsung Electronics
Samsung Galaxy A6/+	Samsung Electronics
Samsung Galaxy A8 Star	Samsung Electronics
Samsung Galaxy Note 9	Samsung Electronics
Samsung Galaxy A7 (2018)	Samsung Electronics
Samsung Galaxy A9 (2018)	Samsung Electronics
Samsung Galaxy A6s	Samsung Electronics
Samsung Galaxy A8s	Samsung Electronics
Samsung Galaxy A10	Samsung Electronics
Samsung Galaxy A30	Samsung Electronics
Samsung Galaxy A50	Samsung Electronics
Samsung Galaxy S10/e/+	Samsung Electronics
Samsung Galaxy S10 5G	Samsung Electronics
Samsung Galaxy A20/A40	Samsung Electronics
Samsung Galaxy A2 Core	Samsung Electronics
Samsung Galaxy A20e	Samsung Electronics
Samsung Galaxy A70	Samsung Electronics
Samsung Galaxy A80	Samsung Electronics
Samsung Galaxy A60	Samsung Electronics
Samsung Galaxy Xcover 4s	Samsung Electronics
Samsung Galaxy A10e	Samsung Electronics
Samsung Galaxy Note 10/+	Samsung Electronics
Samsung Galaxy A10s	Samsung Electronics
Samsung Galaxy A30s/A50s	Samsung Electronics
Samsung Galaxy A90 5G	Samsung Electronics
Samsung Galaxy A70s	Samsung Electronics
Samsung Galaxy Z Fold	Samsung Electronics
Samsung Galaxy A20s	Samsung Electronics
Samsung Galaxy A51/A71	Samsung Electronics
Samsung Galaxy A01	Samsung Electronics
Samsung Galaxy Xcover Pro	Samsung Electronics
Samsung Galaxy Z Flip	Samsung Electronics
Samsung Galaxy S20/+/Ultra	Samsung Electronics
Samsung Galaxy Xcover FieldPro	Samsung Electronics
Samsung Galaxy A31	Samsung Electronics
Samsung Galaxy A11	Samsung Electronics
Samsung Galaxy A41	Samsung Electronics
Samsung Galaxy A51 5G/A71 5G	Samsung Electronics
Samsung Galaxy A21	Samsung Electronics
Samsung Galaxy A21s	Samsung Electronics
Samsung Galaxy A71 5G UW	Samsung Electronics
Samsung Galaxy Z Flip 5G	Samsung Electronics
Samsung Galaxy Note 20/Ultra	Samsung Electronics
Samsung Galaxy Z Fold 2	Samsung Electronics
Samsung Galaxy A01 Core	Samsung Electronics
Samsung Galaxy A51 5G UW	Samsung Electronics
Samsung Galaxy A42 5G	Samsung Electronics
Samsung Galaxy S20 FE	Samsung Electronics
Samsung Galaxy F41	Samsung Electronics
Samsung Galaxy M21s	Samsung Electronics
Samsung Galaxy A12	Samsung Electronics
Samsung Galaxy A02s/M02s	Samsung Electronics
Samsung Galaxy A32 5G	Samsung Electronics



Samsung Galaxy S21	Samsung Electronics
Samsung Galaxy S21+	Samsung Electronics
Samsung Galaxy S21 Ultra	Samsung Electronics
Samsung Galaxy A02	Samsung Electronics
Samsung Galaxy M02	Samsung Electronics
Samsung Galaxy M12	Samsung Electronics
Samsung Galaxy F62	Samsung Electronics
Samsung Galaxy M62	Samsung Electronics
Samsung Galaxy A32	Samsung Electronics
Samsung Galaxy Xcover 5	Samsung Electronics
Samsung Galaxy A52/A52 5G	Samsung Electronics
Samsung Galaxy A72	Samsung Electronics
Samsung Galaxy F02s	Samsung Electronics
Samsung Galaxy F12	Samsung Electronics
Samsung Galaxy Quantum 2	Samsung Electronics
Samsung Galaxy F52 5G	Samsung Electronics
Samsung Galaxy M32	Samsung Electronics
Samsung Galaxy A22/A22 5G	Samsung Electronics
Samsung Galaxy Z Fold 3/Z Flip 3	Samsung Electronics
Samsung Galaxy M52 5G	Samsung Electronics
Google Nexus 10	Samsung Electronics
Ativ Tab	Samsung Electronics
Ativ Tab 3	Samsung Electronics
Ativ Tab 5	Samsung Electronics
Ativ Tab 7	Samsung Electronics
Galaxy Note	Samsung Electronics
Galaxy Tab 7.0 Plus	Samsung Electronics
Galaxy Tab 7.7	Samsung Electronics
Galaxy Tab 8.9	Samsung Electronics
Galaxy Tab 10.1	Samsung Electronics
Galaxy Tab 10.1v	Samsung Electronics
Galaxy Note 8.0	Samsung Electronics
Galaxy Tab 2 10.1	Samsung Electronics
Galaxy Note 10.1	Samsung Electronics
Galaxy Tab 2 7.0	Samsung Electronics
Galaxy Tab 3 7.0	Samsung Electronics
Galaxy Tab 3 8.0	Samsung Electronics
Galaxy Tab 3 10.1	Samsung Electronics
Galaxy Note 10.1 2014 Edition	Samsung Electronics
Galaxy Note Pro 12.2	Samsung Electronics
Galaxy Note 3	Samsung Electronics
Galaxy Tab Pro 12.2	Samsung Electronics
Galaxy Tab 4 10.1	Samsung Electronics
Galaxy Tab A 9.7	Samsung Electronics
Galaxy TabPro S	Samsung Electronics
Galaxy Tab S 8.4	Samsung Electronics
Series 5	Samsung Electronics
Series 5 550	Samsung Electronics
Series 3	Samsung Electronics
Chromebook (all versions)	Samsung Electronics
Galaxy Chromebook (all versions)	Samsung Electronics
Ativ (all versions)	Samsung Electronics
Sens (all versions)	Samsung Electronics
Galaxy Book (all versions)	Samsung Electronics
Nexus S	Samsung Electronics/Google
Galaxy Nexus	Samsung Electronics/Google
Tablet S	Sony
Xperia Tablet S	Sony
Xperia Tablet Z	Sony
Xperia Tablet Z2	Sony
Sony Ericsson Xperia X10	Sony Ericsson
Sony Ericsson Xperia X8	Sony Ericsson
Sony Ericsson Xperia Play	Sony Ericsson
Sony Ericsson Xperia pro	Sony Ericsson
Sony Xperia Z	Sony Mobile
Sony Xperia Z Ultra	Sony Mobile
Sony Xperia Z1	Sony Mobile
Sony Xperia Z1 Compact	Sony Mobile
Sony Xperia Z2	Sony Mobile
Sony Xperia Z3/Compact	Sony Mobile
Sony Xperia Z4	Sony Mobile
Sony Xperia Z5/Compact	Sony Mobile
Sony Xperia Z5 Premium	Sony Mobile
Sony Xperia X/Performance	Sony Mobile
Sony Xperia XA	Sony Mobile
Sony Xperia XA Ultra	Sony Mobile
Sony Xperia X Compact	Sony Mobile
Sony Xperia XZ	Sony Mobile

Sony Xperia XZs/Premium	Sony Mobile
Sony Xperia XA1	Sony Mobile
Sony Xperia XA1 Ultra	Sony Mobile
Sony Xperia L1	Sony Mobile
Sony Xperia XZ1/Compact	Sony Mobile
Sony Xperia XA1 Plus	Sony Mobile
Sony Xperia L2	Sony Mobile
Sony Xperia XA2/Ultra	Sony Mobile
Sony Xperia XZ2/Compact	Sony Mobile
Sony Xperia XZ2 Premium	Sony Mobile
Sony Xperia XZ3	Sony Mobile
Sony Xperia XA2 Plus	Sony Mobile
Sony Xperia 10/10 Plus	Sony Mobile
Sony Xperia L3	Sony Mobile
Sony Xperia 1	Sony Mobile
Sony Xperia 5	Sony Mobile
Sony Xperia 8	Sony Mobile
Sony Xperia L4	Sony Mobile
Sony Xperia 1 II	Sony Mobile
Sony Xperia 10 II	Sony Mobile
Sony Xperia 5 II	Sony Mobile
Sony Xperia Pro	Sony Mobile
Sony Xperia 10 III	Sony Mobile
Sony Xperia 5 III	Sony Mobile
Sony Xperia 1 III	Sony Mobile
TCL Plex	TCL
TCL 10L	TCL
TCL 10 Pro	TCL
TCL 10 SE	TCL
TCL 10 5G	TCL
TCL 10 Plus	TCL
M20 4G	Teclast
Tecno Phantom 6/Plus	Tecno Mobile
Tecno Camon CX	Tecno Mobile
Tecno Camon CX Air	Tecno Mobile
Tecno Spark	Tecno Mobile
Tecno Spark Plus	Tecno Mobile
Tecno Phantom 8	Tecno Mobile
Tecno Spark Pro	Tecno Mobile
Tecno Camon CM	Tecno Mobile
Tecno Spark CM	Tecno Mobile
Tecno Camon X/Pro	Tecno Mobile
Tecno Spark 2	Tecno Mobile
Tecno Camon 11/Pro	Tecno Mobile
Tecno Camon iACE2/2X	Tecno Mobile
Tecno Spark 3/Pro	Tecno Mobile
Tecno Phantom 9	Tecno Mobile
Tecno Spark Go	Tecno Mobile
Tecno Spark 4/Air/Lite	Tecno Mobile
Tecno Camon 12	Tecno Mobile
Tecno Camon 12 Pro	Tecno Mobile
Tecno Camon 12 Air	Tecno Mobile
Tecno Camon 15/Pro	Tecno Mobile
Tecno Camon 15 Air/Premier	Tecno Mobile
Tecno Spark 5	Tecno Mobile
Tecno Spark 5 Air	Tecno Mobile
Tecno Spark 5 Pro	Tecno Mobile
Tecno Spark Power 2	Tecno Mobile
Tecno Pouvoir 4/Pro	Tecno Mobile
Tecno Camon 16 Premier	Tecno Mobile
Tecno Spark 6 Air	Tecno Mobile
Tecno Spark 6	Tecno Mobile
Tecno Camon 16	Tecno Mobile
Tecno Pova	Tecno Mobile
T-Mobile G1	T-Mobile
Excite	Toshiba
Thrive	Toshiba
Thrive 7	Toshiba
Jupiter IO 3	Vaporcade
ViewPad 7X	Viewsonic
ViewPad 10	Viewsonic
Vivo X1	Vivo
Vivo X3	Vivo
Vivo X3S	Vivo
Vivo X5/Max	Vivo
Vivo X5Max+	Vivo
Vivo X5Pro	Vivo
Vivo X5Max Platinum	Vivo

Vivo V1	Vivo
Vivo V1 Max	Vivo
Vivo X6/Plus	Vivo
Vivo X6S/Plus	Vivo
Vivo V3/Max	Vivo
Vivo X7/Plus	Vivo
Vivo X9/Plus	Vivo
Vivo V5	Vivo
Vivo V5 Plus	Vivo
Vivo V5 Lite/Y66	Vivo
Vivo V5s	Vivo
Vivo X9s/Plus	Vivo
Vivo V7+	Vivo
Vivo X20/Plus	Vivo
Vivo V7	Vivo
Vivo X20 Plus UD	Vivo
Vivo X21/UD	Vivo
Vivo V9/Youth	Vivo
Vivo X21i	Vivo
Vivo NEX	Vivo
Vivo V11	Vivo
Vivo X23	Vivo
Vivo V11i	Vivo
Vivo NEX Dual Display	Vivo
Vivo V15/Pro	Vivo
Vivo X27/Pro	Vivo
Vivo V17 Neo	Vivo
Vivo NEX 3	Vivo
Vivo V17 Pro	Vivo
Vivo V17	Vivo
Vivo X30/Pro	Vivo
Vivo NEX 3S	Vivo
Vivo V19	Vivo
Vivo X50 Lite	Vivo
Vivo X50/Pro/Pro+	Vivo
Vivo V19 Neo	Vivo
Vivo V20 Pro	Vivo
Vivo X50e	Vivo
Vivo V20 SE	Vivo
Vivo V20	Vivo
Vivo X51	Vivo
Vivo V20 (2021)	Vivo
Vivo X60/Pro/Pro+	Vivo
Cintiq Companion	Wacom
Redmi 1	Xiaomi
Redmi 1S	Xiaomi
Redmi Note (3G)	Xiaomi
Redmi Note 4G	Xiaomi
Redmi Note Prime	Xiaomi
Redmi 2	Xiaomi
Redmi 2A	Xiaomi
Redmi 2 Prime	Xiaomi
Redmi Note 2	Xiaomi
Redmi 2 Pro	Xiaomi
Redmi Note 3 (MTK)	Xiaomi
Redmi 3	Xiaomi
Redmi Note 3/Pro	Xiaomi
Redmi 3 Pro	Xiaomi
Redmi 3S	Xiaomi
Redmi 3X	Xiaomi
Redmi 3S Prime	Xiaomi
Redmi Pro	Xiaomi
Redmi Note 4 (MTK)	Xiaomi
Redmi 4/Pro/Prime	Xiaomi
Redmi 4A	Xiaomi
Redmi Note 4/4X	Xiaomi
Redmi 4X	Xiaomi
Redmi Note 5A/Prime	Xiaomi
Redmi 5A	Xiaomi
Redmi 5/5 Plus	Xiaomi
Redmi Note 5 Pro	Xiaomi
Redmi Note 5	Xiaomi
Redmi S2/Y2	Xiaomi
Redmi 6/6A/6 Pro	Xiaomi
Redmi Note 6 Pro	Xiaomi
Redmi Note 7	Xiaomi
Redmi Go	Xiaomi
Redmi Note 7 Pro	Xiaomi

Redmi 7	Xiaomi
Redmi Y3	Xiaomi
Redmi 7A	Xiaomi
Redmi K20/Pro	Xiaomi
Redmi Note 8/Pro	Xiaomi
Redmi 8A	Xiaomi
Redmi 8	Xiaomi
Redmi Note 8T	Xiaomi
Redmi K30/5G	Xiaomi
Redmi 8A Dual	Xiaomi
Redmi Note 9 Pro (India)/Pro Max/9S	Xiaomi
Redmi K30 Pro/Pro Zoom	Xiaomi
Redmi Note 9/Pro (Global)	Xiaomi
Redmi 10X/Pro	Xiaomi
Redmi 9	Xiaomi
Redmi 9A	Xiaomi
Redmi 9C	Xiaomi
Redmi 9 Prime	Xiaomi
Redmi K30 Ultra	Xiaomi
Redmi K30S	Xiaomi
Redmi Note 9 4G/5G/Pro 5G	Xiaomi
Redmi 9 Power	Xiaomi
Redmi 9T/Note 9T	Xiaomi
Redmi K40/Pro/Pro+	Xiaomi
Redmi Note 10/Pro/Pro Max	Xiaomi
Redmi Note 10S/5G	Xiaomi
Redmi K40 Gaming	Xiaomi
Redmi Note 8 2021	Xiaomi
Redmi Note 10 Pro 5G	Xiaomi
Redmi Note 10T	Xiaomi
Redmi Note 10 JE	Xiaomi
Redmi 10	Xiaomi
Redmi 10 Prime	Xiaomi
Redmi 9 Activ	Xiaomi
Redmi 9A Sport/9i Sport	Xiaomi
Redmi Note 10 Lite	Xiaomi
Redmi Note 11 5G/Pro/Pro+	Xiaomi
Redmi Note 11 4G	Xiaomi
Redmi Note 11T	Xiaomi
Xiaomi Mi 1	Xiaomi
Xiaomi Mi 1S	Xiaomi
Xiaomi Mi 2	Xiaomi
Xiaomi Mi 2S/A	Xiaomi
Xiaomi Mi 3/TD	Xiaomi
Xiaomi Mi 4	Xiaomi
Xiaomi Mi Note	Xiaomi
Xiaomi Mi Note Pro	Xiaomi
Xiaomi Mi 4i	Xiaomi
Xiaomi Mi 4c	Xiaomi
Xiaomi Mi 4S	Xiaomi
Xiaomi Mi 5	Xiaomi
Xiaomi Mi Max/Pro	Xiaomi
Xiaomi Mi 5s/Plus	Xiaomi
Xiaomi Mi Note 2	Xiaomi
Xiaomi Mi MIX	Xiaomi
Xiaomi Mi 5c	Xiaomi
Xiaomi Mi 6	Xiaomi
Xiaomi Mi Max 2	Xiaomi
Xiaomi Mi 5X/Mi A1	Xiaomi
Xiaomi Mi Note 3	Xiaomi
Xiaomi Mi MIX 2	Xiaomi
Xiaomi Mi MIX 2S	Xiaomi
Xiaomi Mi 6X/Mi A2	Xiaomi
Xiaomi Black Shark	Xiaomi
Xiaomi Mi 8/SE/EE	Xiaomi
Xiaomi Mi Max 3	Xiaomi
Xiaomi Pocophone F1	Xiaomi
Xiaomi Mi 8 Pro/Lite	Xiaomi
Xiaomi Mi MIX 3	Xiaomi
Xiaomi Black Shark Helo	Xiaomi
Xiaomi Mi Play	Xiaomi
Xiaomi Mi 9/SE	Xiaomi
Xiaomi Black Shark 2	Xiaomi
Xiaomi Mi MIX 3 5G	Xiaomi
Xiaomi Mi 9T	Xiaomi
Xiaomi Mi A3	Xiaomi
Xiaomi Mi 9T Pro	Xiaomi
Xiaomi Black Shark 2 Pro	Xiaomi

Xiaomi Mi 9 Lite	Xiaomi
Xiaomi Mi 9 Pro/Pro 5G	Xiaomi
Xiaomi Mi Note 10/Pro	Xiaomi
POCO X2	Xiaomi
Xiaomi Mi 10/Pro	Xiaomi
Xiaomi Black Shark 3/Pro	Xiaomi
Xiaomi Mi 10 Lite	Xiaomi
Xiaomi Mi 10 Youth	Xiaomi
Xiaomi Mi Note 10 Lite	Xiaomi
POCO M2 Pro	Xiaomi
Xiaomi Mi 10 Ultra	Xiaomi
POCO X3 NFC	Xiaomi
POCO M2	Xiaomi
POCO X3	Xiaomi
Xiaomi Mi 10T/Pro/Lite	Xiaomi
POCO C3	Xiaomi
POCO M3	Xiaomi
Xiaomi Mi 11	Xiaomi
Xiaomi Mi 10i	Xiaomi
Xiaomi Mi 10S	Xiaomi
POCO X3 Pro	Xiaomi
POCO F3	Xiaomi
Xiaomi Black Shark 4/Pro	Xiaomi
Xiaomi Mi 11 Pro/Ultra/11i	Xiaomi
Xiaomi Mi 11 Lite/Lite 5G	Xiaomi
Xiaomi Mi MIX Fold	Xiaomi
POCO M2 Reloaded	Xiaomi
Xiaomi Mi 11X/Pro	Xiaomi
POCO M3 Pro	Xiaomi
POCO F3 GT	Xiaomi
POCO X3 GT	Xiaomi
Xiaomi MIX 4	Xiaomi
Xiaomi 11T/Pro	Xiaomi
Xiaomi 11 Lite 5G NE	Xiaomi
Xiaomi 12/Pro/X	Xiaomi
Xiaomi 11i/HyperCharge	Xiaomi
YotaPhone	Yota
YotaPhone 2	Yota
Nubia Z5	ZTE
Nubia Z5S	ZTE
Nubia Z5S mini NX403A	ZTE
Nubia X6	ZTE
Nubia Z7/Max/mini	ZTE
Nubia Z5S mini NX405H	ZTE
Nubia Z9 Max	ZTE
Nubia Z9 mini	ZTE
Nubia Z9	ZTE
Nubia My Prague	ZTE
Nubia Prague S	ZTE
Nubia Z11 mini	ZTE
Nubia Z11 Max	ZTE
Nubia Z11	ZTE
Nubia N1	ZTE
Nubia Z11 mini S	ZTE
Nubia M2/lite	ZTE
Nubia N2	ZTE
Nubia N1 lite	ZTE
Nubia Z17 mini	ZTE
Nubia Z17	ZTE
Nubia Z17 lite	ZTE
Nubia Z17 miniS	ZTE
Nubia Z17s	ZTE
Nubia N3	ZTE
Nubia V18	ZTE
Nubia Z18 mini	ZTE
Nubia Red Magic	ZTE
Nubia Z18	ZTE
Nubia X	ZTE
Nubia Red Magic Mars	ZTE
Nubia Red Magic 3	ZTE
Nubia Z20	ZTE
Nubia Red Magic 3s	ZTE
Nubia Red Magic 5G	ZTE
Nubia Play	ZTE
Nubia Red Magic 5G Lite	ZTE
Nubia Red Magic 5S	ZTE
Nubia Red Magic 6/Pro	ZTE
ZTE Racer	ZTE

ZTE Blade	ZTE
ZTE Libra	ZTE
ZTE Racer II	ZTE
ZTE Skate	ZTE
ZTE Score	ZTE
ZTE Warp	ZTE
ZTE Avail	ZTE
ZTE FTV Phone	ZTE
ZTE Blade II V880+	ZTE
ZTE Score M	ZTE
ZTE V880E	ZTE
ZTE Kis V788	ZTE
ZTE Grand X	ZTE
ZTE Grand X IN	ZTE
ZTE Blade III	ZTE
ZTE Grand Era	ZTE
ZTE Warp Sequent	ZTE
ZTE Grand X LTE	ZTE
ZTE Flash	ZTE
ZTE Groove X501	ZTE
ZTE Kis III V790	ZTE
ZTE N910	ZTE
ZTE Era	ZTE
ZTE V887	ZTE
ZTE V889M	ZTE
ZTE Avid 4G	ZTE
ZTE Grand S	ZTE
ZTE Director	ZTE
ZTE Blade C V807	ZTE
ZTE Blade III Pro	ZTE
ZTE Blade G V880G	ZTE
ZTE Blade G2	ZTE
ZTE Blade V	ZTE
ZTE Blade Q/Maxi/Mini	ZTE
ZTE Blade L2	ZTE
ZTE Blade Vec 3G/4G	ZTE
ZTE Blade S6	ZTE
ZTE Blade G/Lux	ZTE
ZTE Blade L3	ZTE
ZTE Blade L3 Plus	ZTE
ZTE Blade S6 Plus	ZTE
ZTE Blade Qlux 4G	ZTE
ZTE Blade Q Pro	ZTE
ZTE Blade Apex 3	ZTE
ZTE Blade A410	ZTE
ZTE Blade A460	ZTE
ZTE Axon Pro/Lux	ZTE
ZTE Blade D6	ZTE
ZTE Axon Elite	ZTE
ZTE Axon mini	ZTE
ZTE Blade S7	ZTE
ZTE Axon	ZTE
ZTE Blade X3/5/9	ZTE
ZTE Axon Max	ZTE
ZTE Blade V7/Lite	ZTE
ZTE Axon 7	ZTE
ZTE Axon 7 mini	ZTE
ZTE Axon 7 Max	ZTE
ZTE Axon 7s	ZTE
ZTE Maven 2	ZTE
ZTE Blade A6	ZTE
ZTE Axon M	ZTE
ZTE Blade X	ZTE
ZTE Blade A3	ZTE
ZTE Tempo Go	ZTE
ZTE Blade V9/Vita	ZTE
ZTE Axon 9 Pro	ZTE
ZTE Blade A7 Vita	ZTE
ZTE Blade V10/Vita	ZTE
ZTE Axon 10 Pro/5G	ZTE
ZTE Blade L8	ZTE
ZTE Blade A3 (2019)	ZTE
ZTE Blade A7	ZTE
ZTE Blade A5 (2019)	ZTE
ZTE Blade A20	ZTE
ZTE Blade 10 Prime	ZTE
ZTE Blade A7 Prime	ZTE
ZTE Blade Max View	ZTE

ZTE Axon 10s Pro 5G	ZTE
ZTE Axon 11 4G/5G	ZTE
ZTE Blade V 2020	ZTE
ZTE Axon 11 SE 5G	ZTE
ZTE Axon 20 5G	ZTE
ZTE Blade A7s 2020	ZTE
ZTE Blade 20 5G	ZTE
ZTE Axon 20 4G	ZTE
ZTE S30/Pro/SE	ZTE
ZTE Axon 30 Pro/Ultra	ZTE
ZTE Blade 11 Prime	ZTE
ZTE Blade A51	ZTE
ZTE Blade A31	ZTE
ZTE Axon 30	ZTE
ZTE Blade A71	ZTE
ZTE Blade L9	ZTE
ZTE Blade A31 Plus	ZTE
ZTE Voyage 20 Pro	ZTE